

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF FLEMING-MASON ENERGY)
COOPERATIVE, INC. FOR A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY FOR) CASE NO. 2011-00058
ITS CONSTRUCTION WORKPLAN FOR THE)
PERIOD FROM JANUARY 1, 2011 THROUGH)
DECEMBER 31, 2012)

APPLICATION

Fleming-Mason Energy Cooperative, Inc., hereinafter called the "Applicant", respectfully advises the Commission that:

1. The applicant is a nonprofit membership cooperative corporation without capital stock, duly organized and existing under K.R.S. Chapter 279, engaged in the sale of electric energy at retail rates to its member-consumers in the Kentucky counties of Bath, Bracken, Fleming, Lewis, Mason, Nicholas, Robertson and Rowan.

2. The name of the Applicant is "Fleming-Mason Energy Cooperative, Inc.", and its business address is 1449 Elizaville Rd, P. O. Box 328, Flemingsburg, Kentucky, 41041. {807 KAR 5:001, Section 8(1)}

3. The Articles of Incorporation and all amendments thereto for the Applicant were filed previously; reference is made to the following style and case number:

ADJUSTMENT OF RATES OF THE FLEMING-MASON)
RURAL ELECTRIC COOPERATIVE CORPORATION) CASE NO. 1990-00081
FLEMINGSBURG, KENTUCKY)

and incorporated by said reference herein. {807 KAR 5:001, Section 8(3)}

4. This application is for a Certificate of Public Convenience and Necessity (“CPCN”) to construct electric distribution facilities as set out in the attached 01/01/2011 ~ 12/31/2012 Construction Work Plan, hereinafter referred to as the CWP.

5. The CPCN for the CWP will permit the Applicant to construct certain improvements and additions to existing distribution plant necessary to provide adequate and dependable electric service to existing and anticipated new members. System improvements recommended within the CWP will not duplicate existing facilities and are needed to correct voltage problems, improve phase balance, reduce system energy losses and provide for improved service reliability.

6. The CWP covers the period of two years between January 1, 2011 and December 31, 2012, and was prepared by Fleming Mason Energy Cooperative with the overseeing of the firm of Patterson & Dewar Engineers, Inc., PO Box 2808, Norcross, GA and the Applicant’s staff. A copy of the CWP is filed herein and made a part hereof as Exhibit 1 (FME_cwp_041411.pdf). The CWP was submitted to the Rural Utility Service (“RUS”), for approval, which was granted January 21, 2011; said approval is filed herein and made a part hereof within Exhibit 1.

7. The CWP was approved by the Applicant’s Board of Directors on January 3, 2011. Said approval is filed herein and made a part hereof within Exhibit 1.

8. No CWP construction or extensions will require franchises or permits to be filed with the Commission.

9. The CWP and maps filed with this Application provide a description and location of new construction and extensions. All construction and extensions will

provide service to retail consuming facilities located in the territory certified to the Applicant for retail electric service under K.R.S. 278.016 ~.018.

10. Total projected expenditures for the two-year CWP are estimated to be \$6,928,506 and summarized as follows:

- a) \$1,353,000 ~ Line Construction for New Services totaling 32 miles
- b) \$2,482,485 ~ Line Conversions and Line Changes totaling 173 miles
- c) \$995,617 ~ Transformers and Meters
- d) \$258,300 ~ Increased Service Capacity
- e) \$200,000 ~ Sectionalizing Equipment
- f) \$40,000 ~ Line Voltage Regulators
- g) \$0 ~ Line Capacitors
- h) \$1,406,444 ~ Poles
- i) \$0 ~ Step and Auto Transformers
- j) \$192,660 ~ Security Lights

11. The anticipated annual cost of operations, excluding the cost of power, of the proposed facilities is \$883,390. Said anticipated cost of operation is filed herein and made a part hereof as Exhibit 2 (FME_costofoperation_041411.xls).

12. The Applicant does not intend to file for loan funds with RUS or other lenders. Contract and force account work, as well as equipment, will be financed with internally generated funds.

13. The current and projected revenues are sufficient to cover any additional operating expenses that may be incurred in relation to the CWP. The addition of new

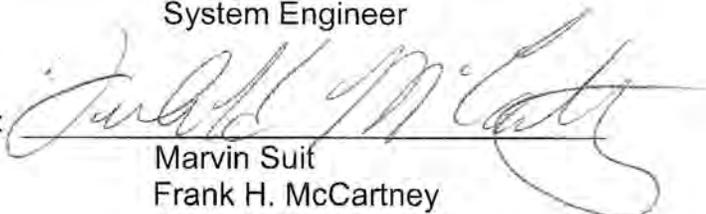
consumers-members should assist in offsetting any additional expenses. The upgraded lines will also reduce system energy losses and assist in offsetting additional expenses.

WHEREFORE, the Applicant now moves the Public Service Commission of the Commonwealth of Kentucky to grant the said Certificate of Public Convenience and Necessity for Applicant's CWP which the Applicant has herein requested and which the Commission has discretion to grant pursuant to KRS 278.020 (1).

WITNESS the hand of the Applicant on this the 24th day of March, 2011; by its authorized representative.

FLEMING-MASON ENERGY COOPERATIVE, INC.

BY: 
BRANDON HUNT
System Engineer

BY: 
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STATE OF KENTUCKY

COUNTY OF FLEMING

Subscribed, sworn to and acknowledged before me by BRANDON HUNT, as System Engineer of FLEMING-MASON ENERGY COOPERATIVE, INC. this 14th day of April, 2011.


NOTARY PUBLIC, STATE AT LARGE, KY
MY COMMISSION EXPIRES: 6-28-14



STATE OF KENTUCKY

COUNTY OF FLEMING

Subscribed, sworn to and acknowledged before me by Marvin Suit, as Attorney for FLEMING-MASON ENERGY COOPERATIVE, INC. this 14th day of April, 2011.


NOTARY PUBLIC, STATE AT LARGE, KY
MY COMMISSION EXPIRES: 6-28-14





KENTUCKY 52 FLEMING
Flemingsburg, Kentucky

CONSTRUCTION WORK PLAN (CWP)
January 1, 2011 ~ December 31, 2012

January, 2011

by:

Gary Grubbs, PE
Nicole Mabe, PE
Steve Conover
Brandon Hunt, EIT



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FLEMING – MASON ENERGY COOPERATIVE

KENTUCKY 52 FLEMING

Flemingsburg, Kentucky

CONSTRUCTION WORK PLAN (CWP)

January 1, 2011 – December 31, 2012

ENGINEERING CERTIFICATION

Fleming-Mason Energy elected, with approval of the RUS KY GFR, to develop a two-year CWP and to seek Board approval, RUS financing and a KY PSC CPCN for the two years.

Upon completion of the construction proposed herein, the above indicated electric distribution system can provide adequate and dependable service to approximately 24,384 customers with residential using a monthly average of 1,240 kilowatt-hours per consumer. The peak demand (normal 50%) is estimated to be approximately 178,000 kW in the summer of 2012 and 214,00 kW in the winter of 2012-2013.

I certify that this 2011-2012 Construction Work Plan was prepared by me or under my direct supervision, and that I am a duly registered professional engineer under the laws of the State of Kentucky.

Patterson & Dewar Engineers, Inc.



Gary Grubbs
Kentucky P.E. No. 13008

KENTUCKY MAP WITH FLEMING - MASON ENERGY'S SERVICE AREA NOTED

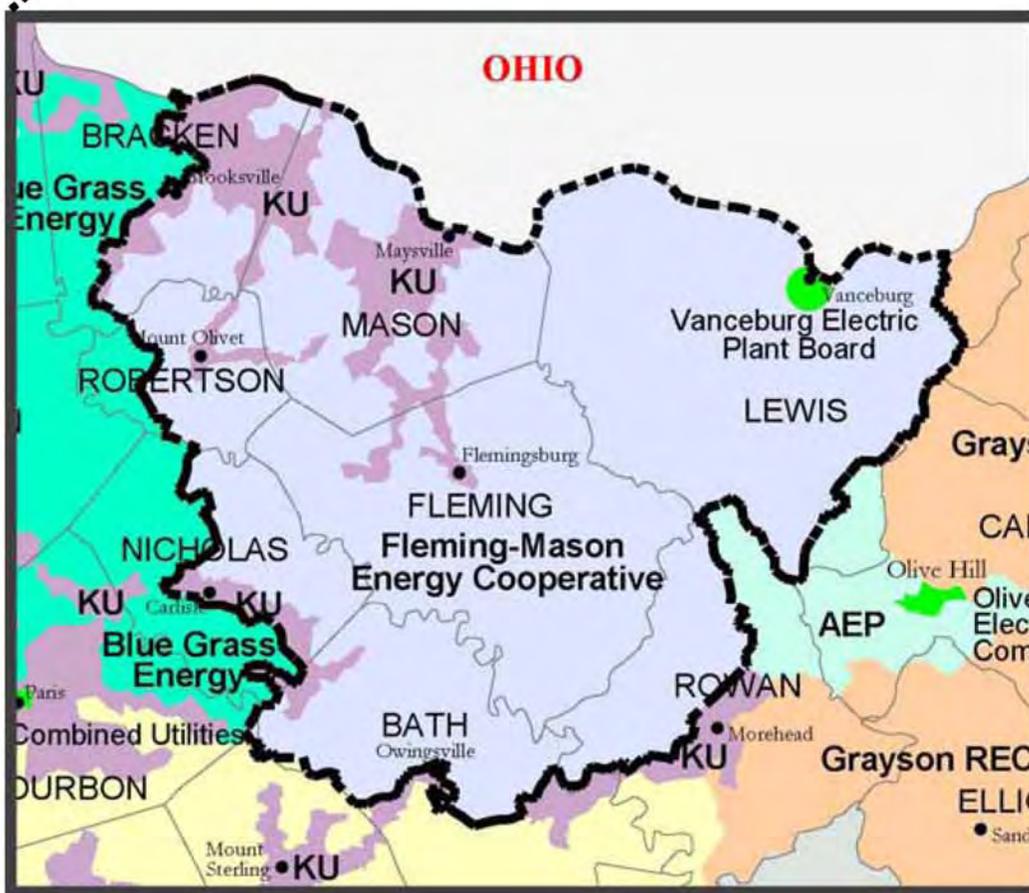
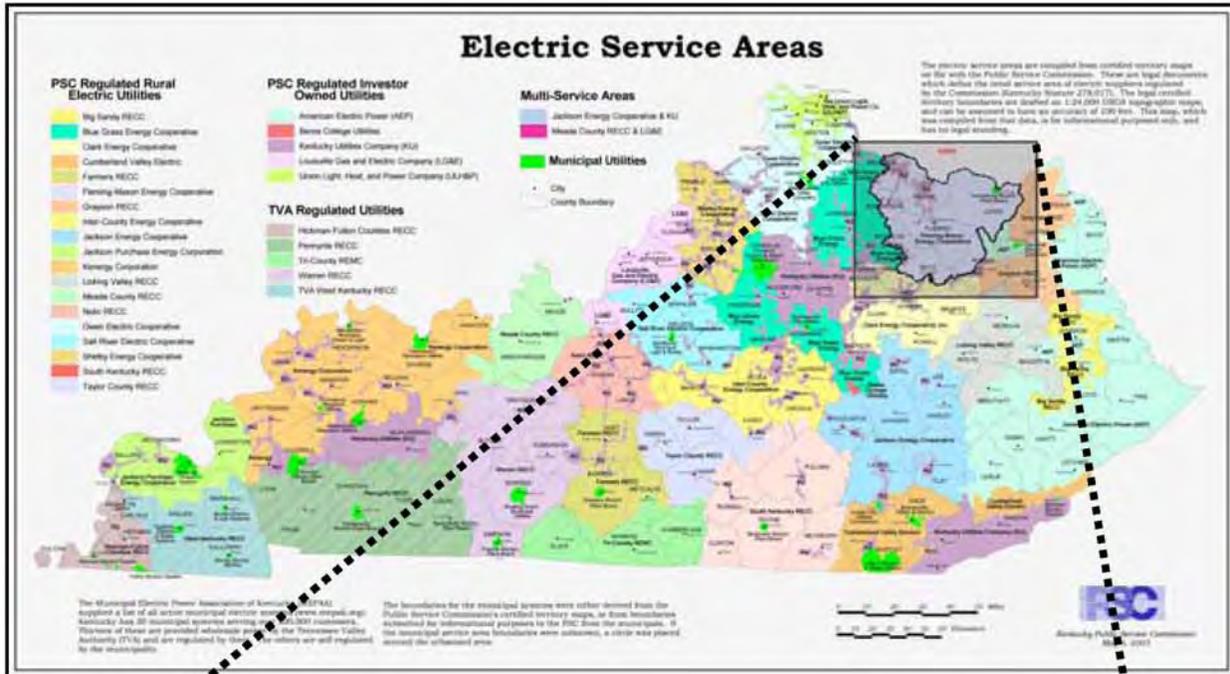


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FLEMING - MASON ENERGY COOPERATIVE

KENTUCKY 52 FLEMING

Flemingsburg, Kentucky

01/11 ~ 12/12 CONSTRUCTION WORK PLAN

December 2, 2010

I. EXECUTIVE SUMMARY

A. Purpose, Results and General Basis of Study

Fleming-Mason Energy elected, with approval of the RUS KY GFR, to develop a two-year CWP and to seek Board approval, RUS financing and a KY PSC CPCN for the two years.

This report documents the Winter 2008 ~ 2009 system engineering analysis, and summarizes the proposed construction for FLEMING - MASON ENERGY COOPERATIVE's (FME's) electric distribution system for the two-year period of January 1, 2010 through December 31, 2011.

The proposed construction program is to be financed by the Rural Utilities Service, (RUS) and/or a supplemental lender. This report provides engineering support, in the form of descriptions, costs, and the justification of required new facilities, as required for an RUS loan application.

Upon construction completion of the proposed facilities, the FME distribution system can provide adequate and dependable service to the following approximate customer count:

Classification	Count	Usage kWh/ Month
Residential	18,163	1,240
Seasonal	4,561	246
Small Commercial	1,650	6,083
Public Building	265	880
Large Commercial	6	7,993,083
Other	4	1,672
Total	24,663	~

The 2012 projected number of consumers and total peak system load were taken directly from the Cooperative's 2010 Load Forecast Report (LFR) as approved by RUS. The 20% probability winter extreme highest KW demand was used for the loading conditions for the next two years.

This loading level was agreed to by FME management and the RUS General Field Representative (GFR).

A review of FME's 2003 Long Range System Study (LRSS), finds the load projections and recommendations to be adequate for the two-year planning period.

The cooperative's Operations and Maintenance Survey (Review Rating Summary - RUS Form 300), was completed on January 30, 2008. Several items were identified for improvements but no recommendations requiring capital funds were listed.

An analysis of thermal loading, voltage drops, physical conditions and reliability, has been performed on all substations, distribution lines, and major equipment of the existing and base system subjected to the peak winter 2009-2010 conditions. The existing base system model has also been grown to the projected winter 2012-2013 loading to develop a future system model. The projected future loading is in agreement with the currently approved 2010 LF. The basis of the system analysis is the RUS guidelines and FME's system design and operating criteria (SDOC).

The summer 2009 system was also reviewed as portions of FME's system may peak in the summer and not in the winter.

The analysis for this CWP utilized Milsoft Utility Solution's (MUS's) WindMil (WM)® software, and the results were used as the basis for determining the capital needs for FME's electric distribution system. The base system computer model was validated using actual line voltage readings made in the field.

B. Service Area, Distribution System and Power Supply

The corporate office of Fleming - Mason Energy Cooperative is located in Flemingsburg, KY. FME consists of one operating district that serves portions of the following counties in Kentucky:

- Bath 2,658 (Customers as of 07/31/09)
- Bracken 785
- Fleming 6,670
- Lewis 4,845
- Mason 2,989
- Nicholas 859
- Robertson 819
- Rowan 3,828

FME operates over 3,506 miles of primary line within the aforementioned counties. Said lines operate presently at voltages of 7.2/12.47 kV or 14.4/25 kV grounded wye. There are a total of 13 distribution substations presently serving the entire FME system. One of the substations is dedicated to a single large industrial consumer.

The following data was taken, or derived, from Fleming - Mason Energy Cooperative's December 2009 RUS Form 7:

Number of Consumers	=	23,792	
KWh Purchased	=	935,441,371	
KWh Sold	=	908,154,690	
KWh Used by Company	=	647,205	
KWh Unaccounted for	=	26,639,476	
KWh losses (%)	=	2.85	% *
KWh losses (%)	=	6.86	% **
Max. NCP kW Demand	=	176,214	***
Total Distribution Plant	=	\$74,006,526	
Miles of Distribution	=	3,517	
Consumers per Mile	=	6.76	
Annual Load Factor	=	60.6	%

* Sales to 5 Large-Power consumers included (< 1000 KVA)

** Sales to 5 Large-Power customers excluded (< 1000 KVA)

*** Coincident peak

FME's power supplier is East Kentucky Power Cooperative (EKPC); an RUS financed generation and transmission cooperative. EKPC's office headquarters is located in Winchester, Kentucky. As power supplier, EKPC accommodates all the generation, transmission and substation requirements of FME and other EKPC cooperatives located in the central and eastern half of Kentucky.

C. System Organization and Operation

FME's headquarters as mentioned earlier is located in Flemingsburg, Kentucky. The system is operated and maintained under the leadership of a CEO, one Operations Superintendent and a System Engineer. Additional support staff of technicians, administrators and aides compliments the System Operations Department.

FME utilizes in-house staking and a mix of in-house and contract construction crews. The contract crews are used mainly for system improvement type projects.

FME's service territory is firmly established by Kentucky statutes. Consumers locating within FME's territorial boundaries are required to be served by FME.

D. Status of Previous Work Plan Projects

This CWP summarizes the current status of the previous work plan site-specific projects. The status of each project is identified as follows:

- COMP ~ Complete
- CPC ~ Complete Pending Closeout
- DEL ~ Deleted
- NP ~ No Progress
- IP ~ In Progress

FME currently has the following approximate amounts of small, aged primary conductor in service:

CONST	CONDUCTOR	MILES	VOLTAGE	MILES	VOLTAGE
1PH	8A CWC	3	7.2 KV	0	14.4 KV
1PH	6A CWC	156	7.2 KV	93	14.4 KV
1PH	6HD CU	15	7.2 KV	8	14.4 KV
1PH	6 ACSR	2	7.2 KV	0	14.4 KV
1PH	4 ACSR	1,076	7.2 KV	593	14.4 KV
2PH	6A CWC	2	7.2 KV	1	14.4 KV
2PH	6HD CU	1	7.2 KV	1	14.4 KV
2PH	4 ACSR	1	7.2 KV	1	14.4 KV
3PH	6A CWC	0	7.2 KV	6	14.4 KV
3PH	6HD CU	1	7.2 KV	8	14.4 KV
3PH	4 ACSR	15	7.2 KV	11	14.4 KV
3PH	2HD CU	0	7.2 KV	2	14.4 KV

Amounts above are based on the existing FME GIS and System Model

Replacement of said conductor is based upon loading, reliability and operational criteria. This work plan recommends replacing a portion of these aged lines.

E. Summary of Construction Program and Costs

The costs of the recommended distribution plant changes over the next two years have been projected as follows:

2011	\$ 4,837,668
<u>2012</u>	<u>\$ 4,837,668</u>
Total	\$ 9,675,336

By comparison, the annual totals for distribution plant additions and replacements during the four previous years are as follows:

2006	\$ 5,330,748
2007	\$ 4,539,510
2008	\$ 3,970,370
<u>2009</u>	<u>\$ 3,282,913</u>
Avg.	\$ 4,280,885

The data mentioned above was taken from FME's four previous year-end *Financial and Statistical Reports*, Line 15, page 3 of the RUS Form 7. Capital expenditures projected for this CWP have increased over past plant expenditures due to material price increases and system improvement increases; however, they remain reasonable.

A further breakdown of the construction program cost is summarized as follows:

		<u>2011</u>	<u>2012</u>	<u>Totals</u>
New Construction	=	\$ 1,240,610	\$1,300,667	\$2,541,277
System Improvements (740C 300)	=	<u>\$ 2,143,220</u>	<u>\$ 2,244,009</u>	<u>\$4,387,229</u>
CWP Totals	=	\$3,383,830	\$3,544,676	\$6,928,506

The total amount above is eligible for RUS loan funds. Each capital item recommended herein was reviewed with engineering and management staff prior to inclusion in this CWP. Approximately 37% of the total capital is for new construction and miscellaneous distribution equipment, leaving approximately 63% for system improvements.

II. BASIS OF STUDY AND PROPOSED CONSTRUCTION

A. Design and Operational Criteria

Exhibit K presents FME's System Design and Operational Criteria (SDOC). On November 10, 2010, the Kentucky RUS General Field Representative (GFR) reviewed and concurred with FME's criteria. The proposed construction as outlined in this 2011-2012 CWP is necessary for meeting the minimum standards set forth in the system's design and operational criteria.

The criteria presented herein are for use in design and operational guidelines only. System conditions may result in a breach/change of a specific criterion.

B. Historical Line and Equipment Costs

Exhibit B presents the historical and projected unit cost averages for new services and new construction. The cost calculations utilize data encompassing a 31-month period ending July 31, 2010.

Line Construction projects are grouped by project type and the averages are expressed on a cost per mile basis. Several of the projected conversion costs do not have a historical cost to reference. These estimates are tabulated, but the cost utilized is based on other system experiences.

C. Analysis of Current System Studies

1. 2010 Load Forecast Report (LFR)

The 2010 Load Forecast Report was approved by FME's Board in October 2010. The report was prepared by EKPC in cooperation with FME's management and staff. The report utilized statistical models to forecast future energy and demand requirements. EKPC provided the economic, demographic, and weather information. FME personnel provided historical information, system specific assumptions, and large commercial and industrial projections. The EKPC staff developed the LF database and forecasting models, and produced the final report.

The LF projected kilowatt-hour sales as well as non-coincident peak kW demands for the period 2010-2030. A 2.0% per year growth in energy sales was projected for the period. Winter and summer peak kW demands were projected to grow approximately 1.9% and 2.0% per year, respectively. The system annual load factor was expected to remain at the 54% level. The LFR offers various projection scenarios for planning purposes and they are as follows:

<u>Winter Peaks</u>	<u>Summer Peaks</u>
Mild (99%)	N/A
Normal (50%)	Normal (50%)
Extreme (20%)	Extreme (20%)
Optimistic (10%)	Optimistic (10%)
Pessimistic (03%)	Pessimistic (03%)

Generally, the normal and mild weather LF scenarios mentioned above are used in the preparation of rate studies and financial forecasts to determine realistic revenue projections. The severe or extreme weather scenarios are used for system capacity planning. This is to assure that adequate capital expenditures are identified for system capacity in order to

provide reliable and quality service to the customer. The extreme winter and summer scenarios with a 20% probability of occurrence were used in this work plan for the future system substation loading conditions.

2. 2003 Long Range System Study (LRSS)

Distribution System Solutions, Inc. prepared a twelve-year LRSS for FME's distribution system in November of 2002. RUS's approval was granted in the winter of 2002. The system configuration and the loads for the winter of 01/02 form the basis for the LRSS.

Consideration should be given for a new LRSS prior to the 2012 to 2013 time period when the current LRSS will be almost 10 years old. This recommendation assumes no other system changes warranting a new study sooner.

The LRSS determined the most economical approach for FME is to continue voltage conversions.

The LRSS also recommends FME standardize on three-phase line construction using primarily 1/0 ACSR, 336 ACSR and 556 ACSR conductor sizes. Exhibit N provides a summary of the current Economical Conductor Analysis that agrees with the recommendations of the LRSS.

In summary, the LRSS appears to be valid for the next 2 years including system improvements necessary to satisfy current and projected system needs through the year 2012. Recommendations incorporated in this CWP are in compliance with the current LRSS.

3. 2005 Operations and Maintenance Survey (RUS Form 300)

In January 2008 FME personnel met with the RUS GFR and conducted a review of FME's facilities and records. This review included substation monthly reports, monthly outage records, and other equipment maintenance records. This review was used as a basis for completing the RUS Form 300, Review Rating Summary, and is included herein as Exhibit M. This survey is used for identifying maintenance, operational and capital needs necessary for proper operation of the electrical distribution system.

In general, the overhead and underground distribution facilities were found to be in satisfactory condition. Likewise, nearly all of the operations, maintenance and engineering programs were found to be satisfactory with no major capital items identified or recommended.

No items were noted on the O&M Survey which requires corrective action.

Some items were noted for improvement; however, no corrective action was recommended. A summary of those items is given as follows:

- Telephone poles left standing after pole replacement should be removed.
- Cable TV attachments need to be monitored continuously for compliance with the NESC.
- A review of idle services and billing records should be conducted.

D. Historical and Projected System Data

1. Annual Consumer, Load, and Losses Data

Exhibit A displays pages from the 2010 Load Forecast prepared by East Kentucky Power Cooperative. The Document explains the annual system data for consumers, system peak demand, losses, and annual load factor.

Total sales are projected to grow by 2.0 percent a year for the period from 2010-2030. Winter and summer peak demands for the same period indicate annual growth of 1.9 and 2.0 percent, respectively.

The annual total distribution non-coincident peak (NCP) load factor was 52.6% for 2009. FME's distribution load factor has ranged from a low of 52.6 % to a high of 66.1% over the past twelve years depending on the severity of the summer and winter peaks. A load factor of approximately 50% was used in the LF to project the worst case scenarios, and is also used in the preparation of this work plan.

The annual distribution system losses were 2.8% for 2009 (includes sales to Large Power Customers). The 2009 total energy sales for FME were 908,155 MWh. With 3,506 miles of distribution line, the 1,000 kWh billed per mile per year ratio calculates to be 259. According to REA Bulletin 45-4, the acceptable loss for this ratio is approximately 8.2%. FME's losses in recent years have averaged 5.6% (after adjusting for Large Power sales), which is well within RUS' established guidelines.

2. Special Loads

Several spot loads were accounted for in this Work Plan.

3. Substation Load Data

Exhibit M summarizes the substation loading and capacities for winter 2008 ~ 2009 system peak conditions. The projected winter 2012 ~ 2013 conditions with and without the recommended system improvements are also presented. The exhibit identifies each substation, its voltage levels, winding capacity, percent of full load, and total peak demand. The loading is given in percent of full load rating of the substation transformer as provided by EKPC. All substations are owned and operated by EKPC.

FME's System Design and Operational Criteria (SDOC), Exhibit L, establishes that a substation's current loading condition is not to exceed 95% of its full nameplate KVA capacity without planning its uprating. This criterion also matches EKPC's policy. Currently none of FME's substations are loaded over this level.

Adequate and reasonable power factor levels are currently being maintained on all substations on FME's system. A capacitor study is included within the scope of this Work Plan and the results are listed in Exhibit I.

4. Circuit Loading and Voltage Conditions

The 2008 ~ 2009 non-coincident winter distribution peak for FME was 202.9 MW¹ established during January 2009. The corresponding peak kWh consumer billing data

¹ Does not include four EKPC Direct-Serve Customers

(January 2009) was used to develop the base system model for the peak 2008-2009 winter conditions.

During December 2009 the system served approximately 23,792 consumers with each residential consumer averaging 1,245 kilowatt-hours each.

Map Set 1:

A series of maps detailing each substation service area at a loading that represents the system during the projected 2012-2013 winter peak. This is a primary analysis of the existing 2006 ~ 2007 system configuration with the projected future 2009 ~ 2010 peak winter conditions. This analysis provides a picture of the system of the future if no system improvements were accomplished. This analysis was the primary basis for most of the system improvements called for in this work plan.

- A voltage below 118 volts is indicated by the color red on that given line section.
- A piece of equipment that shows near capacity is shown by the color blue
- A single phase line section with more than 50 amps is shown by the color green.

Map Set 2:

A series of maps detailing each substation service area at a loading that represents the system during the projected 2012-2013 winter peak with recommended improvements. Through the use of line voltage regulators and capacitors, adequate system voltages are being maintained for current system conditions. In anticipation of future system loading conditions, some line voltage regulator and capacitor changes will be necessary to maintain adequate voltage.

- A voltage below 118 volts is indicated by the color red on that given line section.
- A piece of equipment that shows near capacity is shown by the color blue
- A single phase line section with more than 50 amps is shown by the color green.

5. System Outages and Reliability

FME maintains daily outage reports and prepares monthly and annual summaries. A periodic review of those summaries reveals areas requiring system changes or right-of-way maintenance. Exhibit S presents a summary of the consumer outage hours for the five previous years.

The five year (2005 ~ 2009) consumer outage average is 14.97 hours per consumer per year, which is well in excess of RUS's guideline of 5.0 hours per consumer per year. It should be noted that four of the five years had much less than the RUS 5.0 outage hours per consumer and that it was a devastating ice storm in 2009 that skewed the average. FME will shortly begin work on the recommended components of a newly developed Sectionalizing study.

III. REQUIRED CONSTRUCTION ITEMS

A. Service to New Consumers (740C 100)

During the 24 month period ending January, 2009, FME added 890 underground and overhead services for new consumers. The average line extension cost for each new service was approximately \$2,050. It is estimated that 660 new underground and overhead services will be built over the next two years. Extending these costs for underground and overhead services on a per unit basis, it is estimated that over the next two years \$1,353,000 in capital will be required to construct the new lines. This calculates to be an average of \$676,500 per year.

Exhibit B summarizes the historical data used in projecting the required capital for the new services. Transformer, meter, and security light quantities and costs are also given in this exhibit. Exhibit D summarizes the costs on an annual basis. Approximately 37 % of the capital required for this work plan is estimated to be for new consumer services.

B. New Tie-Lines (740C 200)

No Tie-Lines

C. Distribution Lines - Additions and Changes ~ 740C 300

The recommended CWP line changes and improvements are generally for the following reasons:

- Excessive Voltage Drops
- Excessive Load Currents (or Overloaded Lines)
- Poor Service Reliability

Increasing primary line voltage, increasing conductor size, increasing the number of phases, reducing distances of feed, and installing voltage regulators and capacitors are the methods of correction for excessive voltage drops. Excessive load current is an undesirable situation normally corrected by the same methods used for excessive voltage drops; however, the improvement is recommended in most cases to assure proper coordination of line reclosers or sectionalizing devices.

Right-of-way clearing often results in improved service reliability. However, if specific line components are causing outages, then priority is given to rebuilding the line to replace old and worn-out equipment. Rebuilding a line may include conductor, pole or crossarm replacement, replacing defective insulators, etc. Also the construction of tie-capable lines may improve service reliability. Tie capabilities shorten the circuit feed distance thereby reducing line exposure and also providing loop feed capability. The loop feed capability is very beneficial during outages and line maintenance.

Reviewing the winter 2009-2010 primary analysis of Appendix 1 and considering the load growth estimates of the winter 2012-2013, the distribution line system improvements are as follows. The two year CWP distribution line construction estimate for 740C 300 is \$2,482,285 including line conversions and changes (which does not include copper replacement). No new tie-lines are required or recommended.

Each recommendation of the CWP has been reviewed with FME's staff prior to inclusion in this report. Exhibit F presents a summary of the distribution line construction estimates. Please note the following explanation for the construction RUS reference numbers:

XYX	=	Construction Item Number
X	=	RUS Reference Prefix (2 for tie lines; 3 for line conversions)
ZZ	=	Consecutive Number

Exhibit F also presents construction justification codes for each recommendation. For the sake of brevity, quantitative information regarding the system benefits of each construction item is not presented. The computer model output in the appendices provides this information, (e.g., voltage drop improvements, elimination of overloaded conductor, etc.). Exhibit Q also summarizes the justification for each project.

D. Substation and Meter Point Additions and Changes ~ 740C 500

System Design and Operational Criteria (SDOC), Exhibit K, establishes that a substation's projected future loading condition is not to exceed 95% of its full nameplate KVA capacity without planning its uprating. This criterion also is in agreement with EKPC's loading policy. A review of the future substation loading conditions in Exhibit M without improvements reveals that each of EKPC / FME's substations are well below the SDOC loading criteria. Recommendations have been included herein to transfer load to provide even greater balance and reliability for said substations.

E. Miscellaneous Distribution Equipment ~ 740C 600

1. Transformers (Including Auto/Step) and Meters (740C 601)

For the 24 month period ending January 1, 2010, FME purchased approximately 1,281 transformers and 1,728 meters. Based on 2010 data and the projected slow growth FME is expected to purchase 800 new transformers and 660 new meters during the next two years. The average capitalized cost for each transformer is \$1,146 and for each meter is \$100. This yields a capital requirement of \$9,95617 for the CWP period.

2. Service Upgrades (740C 602)

For the 24 month period ending January 1, 2010, FME increased the service wire capacity of 119 consumers. On this basis FME is expected to upgrade 120 services during the next two years. The average cost for each service upgrade is approximately \$2,153. This yields a capital requirement of \$258,300 for the CWP period.

3. Sectionalizing Equipment ~ Additions and Changes (740C 603)

A complete line sectionalizing review evaluating device coordination and fault current duty is to be included under a separate cover of this work plan. EKPC provided FME low-side source impedance data so that available fault currents at each substation and delivery point can be determined. Also, any device overloading conditions and line configuration changes resulting from the system improvements and revisions included in the work plan are to be included in the study.

Preliminary estimates of this sectionalizing review call for a total cost for the work plan, (RUS Code 603 – sectionalizing equipment) to be \$200,000, or an average annual cost of \$100,000.

4. Line Regulators ~ Additions and Changes (740C 604)

Exhibit H and circuit detail maps present the line voltage regulator changes and cost estimates. The cost of line regulator changes is categorized by RUS reference Code 604.

A number of line regulators are recommended in this CWP. Excessive voltage drops are projected for some areas; therefore, regulators are included herein. The use of said regulators allows management the greatest flexibility in conducting facility upgrades.

Exhibit H itemizes the location of the new regulators and FME is recommended to add the regulators only as system problems are field measured and verified. The cost estimate² for the new regulators is \$40,000 with purchases included for the years 2011 and 2012 (annual cost of 24,000 and 16,000 respectively).

5. Capacitors ~ Additions and Changes (740C 605)

Exhibit I presents the capacitor recommendations for this CWP. Recommendations are included to comply with EKPC power factor policy of no less than 90% at peak for each cooperative delivery point. Recommendations have been included to maintain approximately 95% during the summer peak conditions if switched banks are not required. If switched banks are required to maintain this level, the power factor is allowed to be lower.

FME is encouraged to continue the enforcement of its power factor penalty clause in their C&I service contract, hopefully to get C&I to install both fixed and switched capacitor banks to satisfy their needs. If however, this effort is unsuccessful, FME should install the capacitors on their system to eliminate the penalty charges from EKPC. The monies received from penalizing the C&I customers should be adequate to cover the cost for the capacitor installations.

All capacitor recommendations are based on the computer output of the WindMil (WM)[®] software of Milsoft Utility Solutions, Inc. Capacitor locations and kVAR bank size recommendations were based on circuit loading and minimizing line loss.

The capacitor recommendations included herein conform to the design criteria of Exhibit L.

² FME already has several regulators on hand that can be relocated / reused thus decreasing most purchases

6. Poles (740C 606)

FME's in-service poles have been inspected twice during two prior pole inspection cycles and numerous system improvements have been made in recent years. These activities have modernized such plant and thus led to a reduction in pole replacement requirements.

Current estimates for pole replacements can be found in Exhibit B. The present projected cost for pole replacements based on adjusted historical data is 600 pole change-outs averaging \$2,344 each for a total cost of \$1,406,444.

F. Other Distribution Equipment (740C 700)

1. Security Lights (740C 701)

For the 24 month period ending June 30, 2010, FME increased the number of security lights in service by approximately 340 units. On this basis FME is expected to install 270 new lights during the next two years. The average cost for each new light is \$700. This yields a capital requirement of \$192,660 for the CWP period.

IV. CONCLUSION

The recommendations set forth in this construction work plan will enable **FLEMING - MASON ENERGY COOPERATIVE** to serve the projected 2012-2013 peak winter conditions. The construction recommendations are in accordance with RUS prescribed guidelines and other economic criteria established by FME's Long Range System Study, and related power supply studies. Any questions or comments regarding this report should be directed to Brandon Hunt of Fleming Mason Energy. His email addresses is bhunt@fme.coop and phone number is 606-845-2661. Or contact Steve Conover of Patterson and Dewar Engineers at sconover@pdengineers.com.

**Fleming-Mason Energy
Peak Day Weather Scenarios**

Winter Peak Day Minimum Temperatures					
	Mild	Normal	Extreme		
Degrees	10	-6	-15	-21	-30
Probability	99%	50%	20%	10%	3%

Occurs Once Every	2 Years	5 Years	10 Years	30 Years
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Noncoincident Winter Peak Demand - MW					
Season	Mild	Normal	Extreme		
2010 - 11	192	205	212	217	224
2011 - 12	199	212	219	224	231
2012 - 13	202	214	222	226	234
2013 - 14	205	218	225	230	237
2014 - 15	208	221	229	234	241
2015 - 16	211	224	232	237	244
2016 - 17	216	229	237	242	249
2017 - 18	220	233	241	246	254
2018 - 19	224	238	245	251	258
2019 - 20	228	242	250	255	263
2020 - 21	233	247	255	261	269
2021 - 22	238	252	260	266	274
2022 - 23	243	258	266	271	280
2023 - 24	247	262	270	276	284
2024 - 25	253	268	276	282	290
2025 - 26	259	275	283	289	297
2026 - 27	265	280	289	295	304
2027 - 28	268	284	293	299	308
2028 - 29	273	289	298	304	313
2029 - 30	279	295	304	310	319

Summer Peak Day Maximum Temperatures				
	Normal		Extreme	
Degrees	95	98	100	103
Probability	50%	20%	10%	3%

	2 Years	5 Years	10 Years	30 Years
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Noncoincident Summer Peak Demand - MW				
Year	Normal		Extreme	
2010	169	172	175	179
2011	170	174	177	181
2012	178	182	185	189
2013	181	184	187	191
2014	183	187	190	194
2015	186	190	193	197
2016	189	193	196	200
2017	193	197	200	204
2018	196	201	203	208
2019	200	204	207	211
2020	203	208	211	215
2021	208	212	215	220
2022	212	217	220	224
2023	216	221	224	228
2024	220	225	228	232
2025	225	230	233	237
2026	231	236	239	244
2027	236	241	244	249
2028	240	244	248	253
2029	245	249	253	258
2030	249	254	257	262

Fleming-Mason Energy
2010 Load Forecast
Peaks Summary

<i>Winter</i>			<i>Summer</i>						
Season	Minimum Temperature Normal=-6	Noncoincident Peak Demand (MW)	Year	Maximum Temperature Normal=95	Noncoincident Peak Demand (MW)	Year	Annual Degree Days Normal=6,212	Purchased Power (MWh)	Load Factor (%)
1989 - 90	5	76.1	1990	96	59.5	1990	5,272	326,767	49.0%
1990 - 91	2	69.7	1991	99	61.8	1991	6,096	349,621	57.3%
1991 - 92	-4	71.5	1992	90	66.8	1992	5,652	391,946	62.4%
1992 - 93	-2	100.5	1993	99	95.1	1993	6,341	559,956	63.6%
1993 - 94	-24	110.5	1994	96	98.1	1994	5,988	565,267	58.4%
1994 - 95	-5	107.7	1995	97	101.2	1995	6,398	596,829	63.2%
1995 - 96	-11	117.6	1996	93	96.7	1996	6,663	613,647	59.4%
1996 - 97	-2	119.8	1997	98	106.3	1997	6,107	633,277	60.3%
1997 - 98	7	117.2	1998	95	112.3	1998	5,528	678,141	66.1%
1998 - 99	-8	131.9	1999	97	123.5	1999	5,826	714,885	61.9%
1999 - 00	-5	141.6	2000	94	129.6	2000	6,046	772,325	62.1%
2000 - 01	0	156.1	2001	91	141.4	2001	5,719	809,791	59.2%
2001 - 02	7	161.6	2002	97	151.7	2002	6,428	904,358	63.9%
2002 - 03	-11	194.6	2003	91	146.0	2003	6,047	921,785	54.1%
2003 - 04	-12	181.6	2004	90	146.0	2004	5,808	943,861	59.2%
2004 - 05	-1	188.7	2005	97	159.8	2005	6,299	961,035	58.1%
2005 - 06	3	180.5	2006	94	158.6	2006	5,523	917,648	58.0%
2006 - 07	-2	194.4	2007	101	172.1	2007	6,360	969,671	56.9%
2007 - 08	2	199.9	2008	95	161.9	2008	6,248	1,003,258	57.1%
2008 - 09	-6	202.9	2009	91	163.8	2009	5,800	935,441	52.6%
2009 - 10	1	171.6	2010	95	168.7	2010	6,212	953,299	63.4%
2010 - 11	-6	204.7	2011	95	170.5	2011	6,212	963,267	53.7%
2011 - 12	-6	211.9	2012	95	178.2	2012	6,212	1,008,467	54.2%
2012 - 13	-6	214.5	2013	95	180.6	2013	6,212	1,018,395	54.2%
2013 - 14	-6	218.0	2014	95	183.3	2014	6,212	1,034,544	54.2%
2014 - 15	-6	221.3	2015	95	186.2	2015	6,212	1,050,780	54.2%
2015 - 16	-6	224.5	2016	95	188.8	2016	6,212	1,068,906	54.2%
2016 - 17	-6	229.2	2017	95	192.8	2017	6,212	1,088,432	54.2%
2017 - 18	-6	233.4	2018	95	196.5	2018	6,212	1,109,173	54.2%
2018 - 19	-6	237.7	2019	95	200.2	2019	6,212	1,130,249	54.3%
2019 - 20	-6	241.7	2020	95	203.4	2020	6,212	1,152,158	54.3%
2020 - 21	-6	247.4	2021	95	208.0	2021	6,212	1,175,389	54.2%
2021 - 22	-6	252.4	2022	95	212.1	2022	6,212	1,199,243	54.3%
2022 - 23	-6	257.6	2023	95	216.4	2023	6,212	1,223,929	54.2%
2023 - 24	-6	262.0	2024	95	220.2	2024	6,212	1,248,900	54.3%
2024 - 25	-6	267.7	2025	95	225.1	2025	6,212	1,273,103	54.3%
2025 - 26	-6	274.5	2026	95	231.3	2026	6,212	1,308,128	54.4%
2026 - 27	-6	280.2	2027	95	236.0	2027	6,212	1,335,338	54.4%
2027 - 28	-6	284.2	2028	95	239.7	2028	6,212	1,359,635	54.5%
2028 - 29	-6	289.4	2029	95	244.6	2029	6,212	1,382,900	54.5%
2029 - 30	-6	294.8	2030	95	249.2	2030	6,212	1,409,080	54.6%

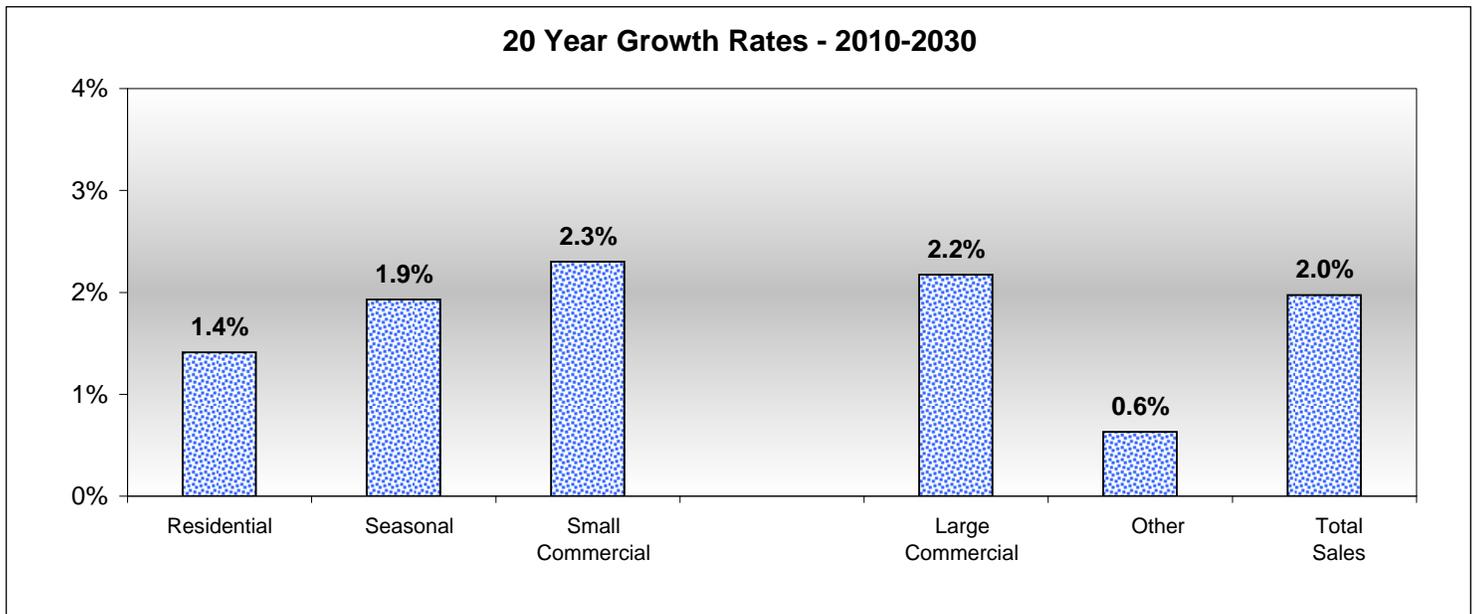
**Fleming-Mason Energy
2010 Load Forecast
MWh Summary**

EXCLUDING DIRECT SERVE LOADS

Year	Residential Sales (MWh)	Seasonal Sales (MWh)	Small Comm. Sales (MWh)	Public Buildings (MWh)	Large Comm. Sales (MWh)	Public Street & Highway Lighting Sales (MWh)	Total Sales (MWh)	Office Use (MWh)	% Loss	Purchased Power (MWh)	EXCLUDING DIRECT SERVE LOADS			
											Direct Serve Loads (MWh)	Total Sales (MWh)	Purchased Power (MWh)	% Loss
1990	139,424	8,992	57,187	0	104,726	67	310,396	415	4.9	326,767	0	310,396	326,767	4.9
1991	150,851	9,321	59,868	0	110,943	67	331,051	484	5.2	349,621	0	331,051	349,621	5.2
1992	153,078	9,660	61,419	0	148,218	59	372,434	488	4.9	391,946	104,503	267,930	287,443	6.6
1993	169,080	10,049	63,542	0	297,749	58	540,477	487	3.4	559,956	297,526	242,951	262,430	7.2
1994	170,529	10,195	63,196	0	300,475	58	544,452	478	3.6	565,267	300,485	243,967	264,781	7.7
1995	180,940	10,965	67,387	0	312,475	56	571,823	494	4.1	596,829	312,475	259,348	284,353	8.6
1996	192,834	12,053	69,374	0	315,752	65	590,077	550	3.8	613,647	315,752	274,326	297,896	7.7
1997	194,553	11,634	81,442	0	320,989	71	608,689	509	3.8	633,277	320,989	287,700	312,288	7.7
1998	201,920	11,232	84,219	0	357,093	73	654,537	442	3.4	678,141	328,750	325,786	349,390	6.6
1999	213,936	11,219	89,951	0	372,055	74	687,235	469	3.8	714,885	333,994	353,242	380,891	7.1
2000	227,598	12,183	103,158	0	401,750	74	744,763	483	3.5	772,325	360,843	383,919	411,482	6.6
2001	232,754	12,769	99,047	0	443,295	74	787,938	509	2.6	809,791	427,126	360,813	382,665	5.6
2002	252,823	14,076	106,617	0	508,225	74	881,815	488	2.4	904,358	486,328	395,487	418,029	5.3
2003	247,949	13,445	108,238	0	524,193	75	893,899	506	3.0	921,785	505,620	388,279	416,165	6.6
2004	258,599	13,846	113,975	0	531,607	74	918,101	471	2.7	943,861	514,137	403,964	429,724	5.9
2005	272,699	14,501	127,138	0	518,973	76	933,387	472	2.8	961,035	501,073	432,314	459,962	5.9
2006	261,387	13,882	124,938	0	495,549	78	895,834	402	2.3	917,648	478,799	417,035	438,849	4.9
2007	279,629	14,679	126,539	0	520,877	76	941,800	648	2.8	969,671	502,413	439,387	467,258	5.8
2008	281,833	14,531	124,029	0	557,323	77	977,792	663	2.5	1,003,258	538,579	439,213	464,678	5.3
2009	265,307	13,080	112,690	0	516,998	80	908,155	647	2.8	935,441	501,400	406,755	434,041	6.1
2010	271,088	13,434	115,108	0	525,789	80	925,498	653	2.8	953,299	510,174	415,323	443,125	6.1
2011	270,228	13,419	117,386	0	534,070	80	935,182	653	2.8	963,267	518,337	416,845	444,930	6.2
2012	270,308	13,455	119,747	0	575,504	80	979,095	653	2.8	1,008,467	526,112	452,983	482,355	6.0
2013	268,980	13,333	122,141	0	584,206	81	988,740	653	2.8	1,018,395	532,689	456,052	485,707	6.0
2014	272,413	13,570	124,734	0	593,632	81	1,004,429	653	2.8	1,034,544	539,347	465,082	495,197	5.9
2015	275,464	13,790	127,431	0	603,436	82	1,020,203	653	2.8	1,050,780	546,089	474,113	504,691	5.9
2016	279,756	14,097	130,237	0	613,640	82	1,037,813	653	2.8	1,068,906	552,915	484,898	515,991	5.9
2017	283,896	14,359	133,380	0	625,065	83	1,056,783	653	2.8	1,088,432	559,827	496,956	528,605	5.9
2018	288,637	14,682	136,634	0	636,896	84	1,076,933	653	2.8	1,109,173	566,824	510,108	542,349	5.8
2019	293,399	15,007	139,954	0	648,965	84	1,097,409	653	2.8	1,130,249	573,910	523,499	556,340	5.8
2020	298,851	15,389	143,287	0	661,081	85	1,118,694	653	2.8	1,152,158	581,084	537,610	571,074	5.7
2021	305,303	15,831	146,669	0	673,375	85	1,141,263	653	2.8	1,175,389	588,928	552,335	586,461	5.7
2022	311,754	16,290	150,177	0	686,131	86	1,164,438	653	2.8	1,199,243	596,879	567,559	602,364	5.7
2023	318,641	16,774	153,761	0	699,159	86	1,188,421	653	2.8	1,223,929	604,937	583,484	618,993	5.6
2024	325,029	17,235	157,517	0	712,813	87	1,212,680	653	2.8	1,248,900	613,103	599,577	635,796	5.6
2025	330,242	17,589	161,388	0	726,888	87	1,236,195	653	2.8	1,273,103	621,380	614,814	651,723	5.6
2026	337,056	18,070	165,372	0	749,635	88	1,270,222	653	2.8	1,308,128	629,769	640,453	678,359	5.5
2027	344,386	18,593	169,381	0	764,208	89	1,296,657	653	2.8	1,335,338	638,271	658,386	697,067	5.5
2028	348,860	18,928	173,436	0	778,950	89	1,320,262	653	2.8	1,359,635	646,887	673,375	712,748	5.4
2029	352,048	19,163	177,573	0	793,991	90	1,342,864	653	2.8	1,382,900	655,620	687,244	727,279	5.4
2030	358,848	19,694	181,478	0	808,188	90	1,368,299	653	2.8	1,409,080	664,471	703,828	744,609	5.4

**Fleming-Mason Energy 2010 Load Forecast
Summary of Sales Growth Rates**

	Time Period	Residential	Seasonal	Small Commercial	Large Commercial	Other	Total Sales
5 Year Growth Rates	1999-2004	3.9%	4.3%	4.8%	7.4%	0.2%	6.0%
	2004-2009	0.5%	-1.1%	-0.2%	-0.6%	1.4%	-0.2%
	2010-2015	0.3%	0.5%	2.1%	2.8%	0.6%	2.0%
	2015-2020	1.6%	2.2%	2.4%	1.8%	0.7%	1.9%
	2020-2025	2.0%	2.7%	2.4%	1.9%	0.6%	2.0%
10 Year Growth Rates	2025-2030	1.7%	2.3%	2.4%	2.1%	0.6%	2.1%
	1999-2009	2.2%	1.5%	2.3%	3.3%	0.8%	2.8%
	2010-2020	1.0%	1.4%	2.2%	2.3%	0.6%	1.9%
	2020-2030	1.8%	2.5%	2.4%	2.0%	0.6%	2.0%



Historical Cost ~ Data Ending July, 2010

DISTRIBUTION	Actual 2008	Actual 2009	Actual To-Date 2010	Estimated 2011	Estimated 2012	CWP (24 Months)
100 ~ NEW SERVICES						
Overhead and Underground						
Number of Services	511	379	196	330	330	660
Total Lineal Feet	126,458	81,450	50,110	84,480	84,480	168,960
Average Feet Per Service	247	215	256	256	256	-
Total Cost	\$1,142,305	\$794,529	\$472,392	\$660,000	\$693,000	\$1,353,000
Average Cost Per Service	\$2,235	\$2,096	\$1,848	\$2,000	\$2,100	-
200 ~ NEW CONSTRUCTION AND TIE LINES ~ None			-	-	-	-
300 ~ LINE CONVERSIONS & CHANGES	\$1,026,335	\$556,524	\$732,584	-	-	\$2,482,485
500 ~ SUBSTATIONS ~ None			-	-	-	-
600 ~ MISCELLANEOUS DISTRIBUTION EQUIPMENT						
601 ~ Transformers & Meters						
Number of Transformers	666	615	241	400	400	800
Total (Installed) Cost of Transformers	\$797,179	\$637,457	\$251,772	\$447,130	\$469,487	\$916,617
Average Cost of (Installed) Transformers	\$1,197	\$1,037	\$1,045	\$1,118	\$1,174	-
Number of Auto and Step Transformers	0	0	0	-	-	-
Total Cost of Auto and Step Transformers	\$0	\$0	\$0	-	-	-
Average Cost of Auto and Step Transformers	\$0	\$0	\$0	-	-	-
Number of New Meters 1ø	1,152	576	929	330	330	660
Total Cost of Meters	\$108,773	\$57,473	\$89,919	\$33,000	\$33,000	\$66,000
Average Cost of Meters	\$94	\$100	\$97	\$100	\$100	-
Number of New Meters 3ø	18	6	14	10	10	20
Total Cost of Meters	\$9,655	\$3,353	\$8,984	\$6,500	\$6,500	\$13,000
Average Cost of Meters	\$536	\$559	\$642	\$650	\$650	-
602 ~ Service Up-Grades*						
Number	59	60	-	60	60	120
Total Cost	\$86,350	\$182,823	\$66,232	\$126,000	\$132,300	\$258,300
Average Cost	\$1,464	\$3,047	-	\$2,100	\$2,205	-
603 ~ Sectionalizing Equipment						
Number				20	20	40
Total Cost				\$100,000	\$100,000	\$200,000
Average Cost				\$5,000	\$5,000	
604 ~ Line Regulators						
Number	18	0	0	3	2	5
Total Cost	\$118,002	\$0	\$0	\$24,000	\$16,000	\$40,000
Average Cost	\$6,556	\$0	\$0	\$8,000	\$8,000	-
605 ~ Capacitors**						
Number	0	0	0	-	-	-
Total Cost	\$0	\$0	\$0	-	-	EKP
Average Cost	\$0	\$0	\$0	-	-	-
606 ~ Poles						
Number	255	352	-	300	300	600
Total Cost	\$535,213	\$766,670	-	\$686,070	\$720,374	\$1,406,444
Average Cost per Pole	\$2,099	\$2,178	-	\$2,287	\$2,401	-
700 ~ OTHER DISTRIBUTION						
701 ~ Security Lights						
Number	135	126	79	135	135	270
Total Cost	\$96,096	\$75,791	\$52,378	\$93,980	\$98,680	\$192,660
Average Cost	\$712	\$602	\$663	\$696	\$731	-
				-	-	\$6,928,506

2008 ~ 2010 CWP PROJECT STATUS

2008/10 740 C #	PROJECT DESCRIPTION			STATUS	2011/12 740 C #
306	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	DEFERRED	
307	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	CARRY OVER	336
309	VARIOUS	TO	VARIOUS	COMPLETE	
310	1 ∅ 4 ACSR	TO	3 ∅ 1/0 ACSR	CARRY OVER	333
311	VARIOUS	TO	VARIOUS	COMPLETE	
312	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	COMPLETE	
313	VARIOUS	TO	VARIOUS	COMPLETE	
314	VARIOUS	TO	VARIOUS	CARRY OVER	307
328	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	COMPLETE	
330	VARIOUS	TO	VARIOUS	CARRY OVER	313
331	1 ∅ 4 ACSR	TO	3 ∅ 1/0 ACSR	DELETE	
332	1 ∅ 4 ACSR	TO	3 ∅ 1/0 ACSR	CARRY OVER	314
333	1 ∅ 4 ACSR	TO	2 ∅ 1/0 ACSR	COMPLETE	
334	VARIOUS	TO	VARIOUS	COMPLETE	
335	1 ∅ 4 ACSR	TO	2 ∅ 1/0 ACSR	CARRY OVER	316
338	VARIOUS	TO	VARIOUS	COMPLETE	
359	VARIOUS	TO	VARIOUS	COMPLETE	
339	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	COMPLETE	
341	VARIOUS	TO	VARIOUS	COMPLETE	
344	1 ∅ 4 ACSR	TO	1 ∅ 4 ACSR	COMPLETE	
348	3 ∅ 4 ACSR	TO	3 ∅ 4/0 ACSR	DELETE	
349	1 ∅ 4 ACSR	TO	3 ∅ 4/0 ACSR	CARRY OVER	325
353	VARIOUS	TO	VARIOUS	DEFERRED	
356	1 ∅ 4 ACSR	TO	3 ∅ 1/0 ACSR	COMPLETE	
357	1 ∅ 4 ACSR	TO	3 ∅ 4/0 ACSR	DEFERRED	
358	VARIOUS	TO	VARIOUS	COMPLETE	

Summary of CFR 740C Distribution Cost Estimates

	Cost Year 1 2011	Cost Year 2 2012	Total CWP Costs
740C REF 100: Line Construction for New Services	= \$660,000	\$693,000	\$1,353,000
740C REF 200: New Construction and Tie Lines	= \$0	\$0	\$0
740C REF 300: Line Conversions and Line Changes	= \$1,207,150	\$1,275,335	\$2,482,485
740C REF 400: New Substations & Metering Points	= \$0	\$0	\$0
740C REF 500: Substation and Meter Point Changes	= \$0	\$0	\$0
740C REF 600: Miscellaneous Distribution Equipment			
1. Code 601 ~ Transformers and Meters	= \$486,630	\$508,987	\$995,617
2. Code 602 ~ Increased Service Capacity	= \$126,000	\$132,300	\$258,300
3. Code 603 ~ Sectionalizing Equipment	= \$100,000	\$100,000	\$200,000
4. Code 604 ~ Line Voltage Regulators	= \$24,000	\$16,000	\$40,000
5. Code 605 ~ Line Capacitors	= \$0	\$0	\$0
6. Code 606 ~ Poles	= \$686,070	\$720,374	\$1,406,444
7. Code 607 ~ Conductor Replacement	= \$0	\$0	\$0
8. Code 612 ~ Step & Auto Transformers	= \$0	\$0	\$0
			\$2,900,361
740C REF 700: Other Distribution Items			
1. Code 701 ~ Security Lights	= \$93,980	\$98,680	\$192,660
Total Estimated Distribution Requirements	= <u>\$3,383,830</u>	<u>\$3,544,676</u>	<u>\$6,928,506</u>

COST ESTIMATE BREAKDOWN FOR 740C

1. DISTRIBUTION

a. 740C Ref. Code 100 - New Services

	Cost Year 1 2011	Cost Year 2 2012	08/09 CWP Totals
100 Overhead and Underground – 330 Consumers per year	\$660,000	\$693,000	\$1,353,000
	\$660,000	\$693,000	\$1,353,000
TOTAL LOAN CODE 100 MILES = 65	CODE 100 TOTALS =		\$1,353,000

b. 740C Ref Code 200: New Construction and Tie Lines (See Exhibit F for further details)

<u>Reference Number</u>	<u>Priority Code</u>	<u>Miles</u>	<u>Existing Construction</u>	<u>Proposed Construction</u>	<u>\$/Mile</u>	Cost Year 1 2011	Cost Year 2 2012	CWP Totals
NONE		0.0						
CODE 200 TOTALS =						\$0	\$0	\$0
TOTAL LOAN CODE 200 COSTS =						\$0		

c. 740C Ref Code 300: Line Conversions and Changes (See Exhibit F for further details)

<u>Reference Number</u>	<u>Priority Code</u>	<u>Miles</u>	<u>Existing Construction</u>	<u>Proposed Construction</u>		Cost Year 1 2011	Cost Year 2 2012	CWP Totals
300		2.60	1ø 4 ACSR	3ø 1/0 ACSR		\$172,000		\$172,000
301		1.50	3ø 6 ACWC	3ø 1/0 ACSR		\$72,000		\$72,000
302		3.60	1ø 2 ACSR	3ø 2 ACSR		\$140,400		\$140,400
303		20.50	25 kV conversion	25 kV conversion		\$172,300		\$172,300
304		3.20	25 kV conversion	25 kV conversion		\$46,200		\$46,200
305		3.30	1ø 4 ACSR	2ø 2 ACSR			\$42,400	\$42,400
307		24.30	25 kV conversion	25 kV conversion			\$167,450	\$167,450
309		0.20	1ø 2 ACSR	1ø 2 ACSR		\$5,500		\$5,500
310		4.30	1ø 4 ACSR	1ø 4 ACSR		\$34,400		\$34,400
311		0.21	1ø 6 ACWC	2ø 1/0 ACSR			\$8,820	\$8,820
313		37.80	25 kV conversion	25 kV conversion			\$307,050	\$307,050
314		7.50	1ø 4 ACSR	3ø 1/0 ACSR		\$231,000		\$231,000
316		13.15	1ø 6 ACWC	3ø 1/0 ACSR		\$107,000		\$107,000
317		2.20	1ø 6 ACWC	3ø 1/0 ACSR			\$159,725	\$159,725
319		17.10	1ø 4 ACSR	1ø 4 ACSR			\$136,800	\$136,800
320		4.70	25 kV conversion	25 kV conversion		\$38,650		\$38,650
322		4.90	1ø 2 ACSR	1ø 2 ACSR		\$39,200		\$39,200
323		0.40	1ø 4 ACSR	1ø 2 ACSR			\$11,000	\$11,000
324		0.40	1ø 2 ACSR	3ø 2 ACSR		\$15,600		\$15,600
325		1.50	1ø 4 ACSR	3ø 336 ACSR			\$114,000	\$114,000
327		0.32	1ø 4 ACSR	3ø 1/0 ACSR		\$14,720		\$14,720
328		0.62	1ø 6 HDCU	3ø 336 ACSR			\$47,120	\$47,120
329		0.83	1ø 4 ACSR	3ø 1/0 ACSR		\$38,180	\$38,180	\$76,360
330		0.50	1ø 2 ACSR	3ø 1/0 ACSR			\$36,440	\$36,440
332		1.50	1ø 4 ACSR	1ø 4 ACSR			\$42,250	\$42,250
333		6.50	1ø 4 ACSR	3ø 1/0 ACSR			\$164,100	\$164,100
336		10.00	1ø 4 ACSR	1ø 4 ACSR		\$80,000		\$80,000
		173.63	miles			\$1,207,150	\$1,275,335	
CODE 300 TOTALS =						\$2,482,485		

d. 740c Ref Code 400: New Substations, Switching Stations, Metering Points - (See Exhibit G for further details)

<u>Reference Number</u>	<u>Priority Code</u>	<u>Proposed Construction</u>		Cost Year 1 2011	Cost Year 2 2012	CWP Totals
NONE	N/A	NONE				
CODE 400 TOTALS =				\$0	\$0	\$0

COST ESTIMATE BREAKDOWN FOR 740C (continued)

e. 740c Ref Code 500: Substation, Switching Stations, Metering Point Changes - (See Exhibit G for further details)

Reference Number	Priority Code	Proposed Construction	Cost Year 1 2008	Cost Year 2 2009	CWP Totals
CODE 500 TOTALS =			\$0	\$0	
TOTAL LOAN CODE 500 COSTS =					\$0

f. 740c Ref Code 600: Miscellaneous Distribution Equipment

601	Transformers and Meters (Underground & Overhead)				
	Up-rated Transformers ~ Combined with OH		\$0	\$0	\$0
	New UG ~ 0 per year @ (combined with OH)		\$0	\$0	\$0
	New OH ~ 400 per year @ \$1,174		\$447,130	\$469,487	\$916,617
	25 kV Conversion ~ Combined with OH		\$0	\$0	\$0
	** New Auto & Step Transformers		\$0	\$0	\$0
	New 1PH Meters ~ 330 per year @ \$100		\$33,000	\$33,000	\$66,000
	New 3PH Meters ~ 10 per year @ \$650		\$6,500	\$6,500	\$13,000
	* Replacement AMR Meters ~ 0 per year @		\$0	\$0	\$0
	Subtotals =		\$486,630	\$508,987	\$995,617
602	Service Increased Capacity ~ 60 / year @ \$2,200 each	=	\$126,000	\$132,300	\$258,300
603	Sectionalizing Equipment	=	\$100,000	\$100,000	\$200,000
604	Line Voltage Regulators	=	\$24,000	\$16,000	\$40,000
605	Line Capacitors	=	\$0	\$0	\$0
606	Pole ~ 300 poles / year @ \$2,400	=	\$686,070	\$720,374	\$1,406,444
607	Conductor Replacement ~ Non Site Specific	=	\$0	\$0	\$0
	* Financing not requested				
CODE 600 TOTALS =			\$1,422,700	\$1,477,661	\$2,900,361

g. 700 - Other Distribution

701	Security Lights ~ 135 units per year @ \$731 each	=	\$93,980	\$98,680	\$192,660
CODE 700 TOTALS =			\$93,980	\$98,680	\$192,660
TOTAL DISTRIBUTION =			\$3,383,830	\$3,544,676	\$6,928,506

BREAKDOWN OF COST ESTIMATES FOR FINANCIAL FORECAST

NEW CONSTRUCTION		Cost Year 1 2011	Cost Year 2 2012	CWP Totals
Line Extensions		\$660,000	\$693,000	\$1,353,000
Transformers and Meters		\$486,630	\$508,987	\$995,617
Security Lights		\$93,980	\$98,680	\$192,660
TOTAL NEW CONSTRUCTION =	37%	\$1,240,610	\$1,300,667	\$2,541,277
SYSTEM IMPROVEMENTS				
New Tie Lines		\$0	\$0	\$0
Conversions (Code 300)		\$1,207,150	\$1,275,335	\$2,482,485
Transformers for Conversions		\$0	\$0	\$0
New Substations		\$0	\$0	\$0
Substation Changes		\$0	\$0	\$0
Service Wires Upgraded		\$126,000	\$132,300	\$258,300
Sectionalizing Equipment		\$100,000	\$100,000	\$200,000
Line Regulators		\$24,000	\$16,000	\$40,000
Line Capacitors		\$0	\$0	\$0
Pole Replacements		\$686,070	\$720,374	\$1,406,444
TOTAL SYSTEM IMPROVEMENTS =	63%	\$2,143,220	\$2,244,009	\$4,387,229
Total CWP Costs =				\$6,928,506

ESTIMATED CONSTRUCTION COST PER MILE

Description	New Cost 2007-2009 CWP
1ph 6 CU to 1ph 2ACSR	\$ 25,000 / mile
1ph 6 CU to 2ph 2ACSR	\$ 35,000 / mile
1ph 6 CU to 3ph 2ACSR	\$ 40,000 / mile
New 1ph 2ACSR	\$ 27,500 / mile
1ph 2ACSR to 2ph 2ACSR	\$ 29,000 / mile
1ph 2ACSR to 3ph 2ACSR	\$ 39,000 / mile
2ph 2ACSR to 3ph 2ACSR	\$ 19,000 / mile
1ph 6 CU to 1ph 1/0ACSR	\$ 30,000 / mile
1ph 6 CU to 2ph 1/0ACSR	\$ 42,000 / mile
1ph 6 CU to 3ph 1/0ACSR	\$ 46,000 / mile
1ph 1/0ACSR to 2ph 1/0ACSR	\$ 31,000 / mile
1ph 1/0ACSR to 3ph 1/0ACSR	\$ 35,000 / mile
2ph 1/0ACSR to 3ph 1/0ACSR	\$ 17,500 / mile
2ph 6 CU to 3ph 1/0ACSR	\$ 42,000 / mile
3ph 6 CU to 3ph 1/0ACSR	\$ 48,000 / mile
New 3ph 1/0ACSR	\$ 45,000 / mile
1ph 6 CU to 3ph 336ACSR	\$ 76,000 / mile
2ph 6 CU to 3ph 336ACSR	\$ 78,000 / mile
3ph 1/0ACSR to 336ACSR	\$ 78,000 / mile
New 3ph 336ACSR	\$ 85,000 / mile
Any Double Circuit 336ACSR	\$ 105,000 / mile
New 3ph 556ACSR	\$ 100,000 / mile
1ph 25kV conversion	\$ 8,000 / mile
3ph 25kV conversion	\$ 17,000 / mile
Transformers	\$ 875 each

Substation and Meter Point Cost Estimates

CODE 400: NEW SUBSTATIONS AND METER POINTS

East Kentucky Power Cooperative owns and maintains all substations

CODE 500: SUBSTATION AND METER POINT CHANGES

East Kentucky Power Cooperative owns and maintains all substations

FME REGULATOR STATIONS ~ 740C 604

SUBSTATION	STATUS	STATION	CWP	#	SIZE (A)	VOLT	AMPS	% LOAD	REMARKS
CHARTER	EXISTING	RG34	~	3	100	14.4	57	57%	~
	EXISTING	RG230555001	~	3	200	14.4	75	38%	~
	EXISTING	RG150878001	~	1	100	7.2	42	42%	~
FLEMINGSBURG	EXISTING	RG1096431565	~	3	200	7.2	133	67%	REMOVE
	EXISTING	RG-516500879	307	3	100	7.2	110	110%	REMOVE
HILDA 1	EXISTING	RG26	~	3	100	7.2	142	142%	CHANGE (OVERLOAD)
	INSTALL	~	604-01	3	200	7.2	142	71%	INSTALL
	INSTALL	~	604-02	1	100	7.2	88	88%	INSTALL
HILLSBORO	NONE								
MAYSVILLE	REMOVE	RG14	314	1	100	14.4	84		REMOVE
	INSTALL	~	604-03	1	50	7.2	40	80%	INSTALL
MURPHYSVILLE	REMOVE	RG634842757	317	1	100	7.2	52		REMOVE
	EXISTING	RG240439001	~	3	200	14.4	147	74%	~
OAK RIDGE	REMOVE	RG35	~	1	100	7.2	47	47%	~
	INSTALL	~	604-04	1	50	7.2	42	84%	INSTALL
PEASTICKS	EXISTING	RG29378565	~	1	100	7.2	50	50%	~
	REMOVE	RG1949182874	322	1	50	7.2	96	192%	REMOVE
	INSTALL	~	604-05	1	100	7.2	52	52%	INSTALL
PLUMBERS LANDING	EXISTING	RG938754825	~	3	200	7.2	154	77%	~
	EXISTING	RG330216001	~	1	50	7.2	65	130%	CHANGE (OVERLOAD)
	REMOVE	REG249	~	1	50	7.2			REMOVE
	INSTALL	~	604-06	1	50	7.2	42	84%	INSTALL
RECTORVILLE	EXISTING	RG13	~	3	200	7.2	258	129%	REVIEW OVERLOAD
SHARKY	EXISTING	RG390207001	332	1	50	7.2	134	268%	CHANGE ~ #332 TO REMOVE LOAD
SNOW HILL	EXISTING	RG300427001	~	1	50	7.2	57	114%	REVIEW OVERLOAD
	INSTALL	~	604-07	1	100	7.2	81	81%	INSTALL
	EXISTING	RG2031057059	~	1	100	7.2	28	28%	~

FLEMING-MASON ENERGY COOPERATIVE
Kentucky 52 Fleming
Flemingsburg, Kentucky

2011-2012 CONSTRUCTION WORK PLAN
Capacitor Recommendations and Cost Estimates
RUS Reference Code 605

Substation	Circuit	Line Section	Existing Bank		Recommendations
			Size	kV	
Charters	Tollesboro	CO23032	300	14.4	-
	Holly	CO17587	300	14.4	-
	Holly	CO17967	300	14.4	-
	Vanceburg	CO23849	300	14.4	-
			CO19548	300	14.4
Flemingsburg	Underbuild	CO13068	300	14.4	Remove
		CO7695	-	-	Add 300 kVAR - 14.4kV
	Tilton	CO13230	-	-	Add 300 kVAR - 7.2 kV
	Cowan	CO16036	300	14.4	-
	Mt. Carmel	CO30675	600	14.4	-
Hilda	Cranston	CO4248	300	7.2	-
		CO4327	-	-	Add 300 kVAR - 7.2 kV
	Inter Change	CO332	600	7.2	-
	Bluestone	CO473	300	7.2	-
	Park Hills	CO3035	300	7.2	-
		CO3781	-	-	Add 300 kVAR - 7.2 kV
Hillsboro	Sherburne	CO12055	300	7.2	-
		CO2069782642	-	-	Add 300 kVAR - 7.2 kV
Maysville	Moransburg	CO24533	300	14.4	-
		CO24699	300	14.4	-
		CO23930	-	-	Add 300 kVAR - 14.4kV
	Industrial	CO-	600	14.4	-
				-	-
	Maysville	CO23958	450	14.4	-
Murphysville	Stone Wall	CO27633	300	14.4	-
		CO27259	-	-	Add 300 kVAR - 14.4kV
Oak Ridge	Mud Lick	CO18809	300	14.4	-
	Burtonville	CO18692	300	14.4	Remove

FLEMING-MASON ENERGY COOPERATIVE
Kentucky 52 Fleming
Flemingsburg, Kentucky

2011-2012 CONSTRUCTION WORK PLAN
Capacitor Recommendations and Cost Estimates
RUS Reference Code 605

Substation	Circuit	Line Section	Existing Bank		Recommendations
			Size	kV	
Peasticks	Sharpsburg	CO9766	-	-	Add 300 kVAR - 14.4kV
		CO10808	-	-	Add 300 kVAR - 14.4kV
Plummers Landing	Hillsboro	CO5407	300	7.2	Remove
	Blue Bank	CO6538	300	7.2	-
Rectorville	Plumville	CO28597	300	14.4	-
	Tollesboro	CO21372	300	7.2	-
	Owl Hollow	CO23569	-	-	Add 300 kVAR - 7.2 kV
Sharkey	Sharkey	CO3575	300	7.2	-
		CO3499	600	7.2	-
Snow Hill	Blue Lick	CO16855	300	14.4	Remove
		CO13971	-	-	Add 300 kVAR - 14.4kV

FLEMING-MASON ENERGY COOPERATIVE
Kentucky 52 Fleming
Flemingsburg, Kentucky

2008-2009 CONSTRUCTION WORK PLAN
Capacitor Recommendations and Cost Estimates
RUS Reference Code 605

SUMMARY AND COST ESTIMATES

<u>7.2kV Capacitors</u>	<u>Totals</u>
300 kVAR Banks Installed	5
300 kVAR Banks Removed	1
300 kVAR Banks Required	4
<u>14.4kV Capacitors</u>	<u>Totals</u>
300 kVAR Banks Installed	6
300 kVAR Banks Removed	3
300 kVAR Banks Required	3
600 kVAR Banks Installed	1
600 kVAR Banks Removed	0
600 kVAR Banks Required	1

12 banks installed x \$2,000 per bank = \$24,000

Note : Capacitors are provided by EKPC.
\$2,000 per bank is included to cover the cost of cutouts,
arresters, crossarms, and the labor to install

Sectionalizing Recommendations and Cost Estimates
RUS Reference Code 603

Fleming Mason Energy is currently working on a system wide sectionalizing study of our complete electrical distribution system. The study is scheduled to be completed in the first quarter of the calendar year of 2011. The RUS field representative suggested that the study be completed and verified the above completion date.

The said study will review and recommend coordination philosophy with input from the FME staff. The recommendations will comprise fusing, recloser and breaker settings, sectionalizing equipment and all pertinent devices from the low-side of each substation to the end of each circuit/feeder. Coordination with substation high-side fusing and relaying will be included within the scope of the study.

The estimated cost of equipment and labor for this project is slightly greater than \$200,000.

RUS 740C CODE 603: \$200,000

Fleming-Mason Energy Cooperative
Kentucky 52
2011 ~ 2012 Construction Work Plan

Each of the criteria items listed below was reviewed and concurred by the RUS General Field Representative (GFR) for Fleming-Mason Energy Cooperative ('FMEC') on November 11, 2010.

Construction proposed in this construction work plan (CWP) is required to meet the following minimum standards of adequacy for voltages, thermal loading, safety and reliability on the system. Note that references to future conditions imply the current CWP projections.

It is further understood that the criteria given herein is considered to be a guideline and not a mandate. Oftentimes system conditions will occur which may result in a breach of a specific criteria. Such a condition is considered to be only temporary and is not intended for long range operations.

I. SYSTEM DESIGN CRITERIA

A. Substations:

1. FMEC's power supplier, East Kentucky Power Cooperative (EKPC), has the primary responsibility for providing the substation transformer capacity including regulation. It is EKPC's responsibility to provide FMECC the requested delivery voltage to FMEC's low side inter-connect point for power distribution.
2. EKPC establishes the capacity of the equipment in each substation. It is defined for both the winter and the summer peak conditions. EKPC's current policy is to load power transformers to 95 percent of the full winter or summer rating with at least a 95 percent power factor. When that load level is exceeded, system planning is set in place for either providing additional capacity in the service area or evaluating opportunities for temporary transfer of load to adjoining substation(s).
3. All new substations and/or delivery points will be justified per the current Long Range System Study as well as power supply studies following the format required by the Power Supplier.

B. Distribution Lines:

1. All new distribution lines are to be designed and built according to RUS standard construction specifications and guidelines for the *medium* NESC loading district.
2. All new primary construction is to be overhead except where underground is required to comply with governmental or environmental regulations, local restrictions or favorable economics.
3. New lines and line conversions are to be built according to the standard 14.4/25.94 kV primary voltage levels as recommended in the current Long Range System Study.
4. New primary conductor sizes are to be determined on a case by case basis using the Economic Conductor Analysis computer program along with local input based upon specific system conditions. A minimum of 1/0 ACSR is to be used on main three-phase lines and a minimum of 4 ACSR is to be used on tap lines.
5. Primary conductors are not to be loaded for long periods of time, over 50% of their thermal rating for summer loading, or 65% for winter. Operating capacity is defined as the manufacturer's conductor ratings at the conductor's maximum operating temperature of 75° C (or 167° F), with a 25° C or (77° F) ambient temperature and a 2 mph wind. Major tie lines between substations can be loaded to 100% of operating capacity during back feed or emergency situations.
6. The maximum voltage drop from the substation on primary distribution lines is normally not to exceed 8 volts unregulated, 16 volts with one bank of line voltage regulators, and 24 volts with two banks of line voltage regulators.

Fleming-Mason Energy Cooperative
Kentucky 52
2011 ~ 2012 Construction Work Plan

7. Single-phase taps will be considered for multi-phasing or voltage conversion if conditions are present that meet all of the following criteria:
 - Serve more than 60 consumers @ 7.2/12.47 kV or 120 consumers @ 14.4/25 kV.
 - Have a projected future load over 250 to 360 kW @ 7.2/12.47 kV (35 to 50 amps) or 500 to 720 kW @ 14.4/25 kV (35 to 50 amps).
 - The tap serves an area that is growing.
8. Conductors are to be considered for replacement if found to be in poor condition and have contributed to multiple line outages.

C. Distribution Line Equipment:

1. Distribution class MOV arresters and related pole grounds are to be considered for installation at a minimum of every 1,500 feet of line.
2. Line voltage regulator projected future loading will be considered for a replacement when the load reaches 95% of nameplate rating at 10% buck or boost or 150% at 5% buck or boost.
3. Auto & step transformer projected future loading will be considered changing when load reaches 95% of nameplate rating at peak load.
4. Capacitor banks will be installed on distribution lines as required to strive to maintain 95% lagging power factor at peak loading conditions. Capacitors will be located so as to maximize the kW loss reduction and to limit the voltage rise on the circuit extremities.

D. Service Reliability:

1. Outage datum will be accumulated and evaluated in accordance with the latest RUS Bulletin 161-1.
2. Outages will be evaluated and classified as to cause by substation. The outages will then be evaluated for any reduction efforts that may be possible.
3. System wide total consumer outages should strive to be less than 5 consumer outage hour's average per year; less than 3.5 consumer outage hours will be targeted.
4. Efforts, where practical, shall be made to provide alternative feeds to critical loads and substation feeders.
5. FMEC's power supplier, EKPC, will be encouraged to maintain a power supplier outage average per year of less than 1.0 hour per consumer. Power supply annual average above 1.0 hour will be reviewed and evaluated for possible system improvement.

E. Voltage Conditions:

1. Voltage levels will be maintained in accordance with the latest RUS Bulletin 169-4 and the latest edition of the American National Standards Institute (ANSI) Standard C84.1. (See **Table 1**) The ANSI Standard defines "Range A" and "Range B" voltage limits as follows:
 - **Range A - Service Voltage**

Electric supply systems shall be so designed and operated that most service voltages are within the limits specified for this range. The occurrence of service voltages outside these limits is to be infrequent.
 - **Range A - Utilization Voltage**

Fleming-Mason Energy Cooperative
 Kentucky 52
 2011 ~ 2012 Construction Work Plan

User systems shall be so designed and operated such that, with service voltages within Range A limits, most utilization voltages are within the limits specified for this range. Utilization equipment shall be so designed and rated to give fully satisfactory performance throughout this range.

- **Range B - Service and Utilization Voltages**

This range includes voltages above and below Range A limits that necessarily result from practical design and operating conditions on supply and/or user systems. Although such conditions are a part of practical operations, they shall be limited in extent, frequency and duration. When they occur, corrective measures shall be undertaken within a reasonable time to improve voltages to meet Range A requirements.

Insofar as practicable, utilization equipment shall be designed to give acceptable performances in the extremes of this range of utilization voltage, although not necessarily as good performance as in Range A.

Table 1. Voltage Ranges ANSI Standard C84.1 (120 volt base)

Range	Minimum		Service Voltage	Maximum
	Utilization Voltage*			Utilization & Service Voltage
	Non-lighting loads	Loads including lighting		
A	108	110	114	126
B	104	106	110	127

* **Note:** Caution should be exercised in using minimum utilization voltage as in some cases they may not be satisfactory for the equipment served. For example, where existing 220-volt motors are used on 208-volt circuits, the minimum utilization voltage permitted would not be adequate for the operation of motors.

2. Basic RUS Recommended Design Criteria (**Table 2**):

- Rural electric distributions systems should be designed and operated to meet the voltage level requirements of “Range A” in ANSI C84.1-1970. Users’ utilization electrical equipment of all types will generally be designed to give satisfactory performance in this range.
- It is recognized that maintaining voltage levels within “Range A” on all parts of the system at all times cannot be assured. Due to the economics of operation, there may be some system voltages that fall in extremes of “Range B” and even beyond. This may occasionally occur as the feeder reaches its design loading limit at annual or semi-annual peak loads.
- When voltages frequently extend into “Range B”, they should be corrected to conform to “Range A” requirements within a reasonable time. If voltages on any part of the system fall outside the limits of “Range B”, corrective actions should be taken immediately to bring these voltages within “Range B” requirements within a reasonable time.

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Table 2. Voltage Drops for Rural Electric Distribution System Design (120 volt base)

	Maximum Volts Drop	Percent Volts Drop
Substation regulated bus (output) to last distribution transformer (primary)	8	6.67 %
Distribution transformer (primary) to service delivery connection to consumers' wiring (meter or entrance)	4	3.33 %
Utility service delivery point (meter or entrance switch) to consumers' utilization terminal (outlet):		
Loads including Lights	4	3.33 %
Non-lighting Loads	6	5.00 %

Note: Some types of utilization equipment will not perform satisfactorily or efficiently at the extremes of "Range B" voltages. Outside "Range B" voltage limits, many types of utilization equipment may fail to operate and may be seriously damaged or suffer shortened operating life. Voltages above these limits of Range B may be especially damaging to the users' equipment.

The voltage input to distribution substations should be kept within limits as follows:

- Substation voltages are kept within the design limits of the substation transformers and other equipment.
- The substation voltage regulator can maintain the voltages on its output bus within the limits given in **Table 3**.

Table 3. Voltage Level Limits and Spread for Rural Electric Distribution Systems. (Measured at center of regulator bandwidth - 120 volt base)

	Voltage Levels (Volts)		Voltage Spread (Volts)
	Minimum	Maximum	
Substation Regulated Bus with Regulator:			
Line Drop Compensator in Use	122	126	4
Distribution Transformer Primary Terminals:			
Adjacent to substation bus	122	126	4
At end of line (8-Volt drop)	118	122	4
Service Connection (Meter Socket):			
At transformer nearest substation bus	118	126	8

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At end of line (8-Volt drop on primary)	114	122	8
Point of Consumer Utilization:			
At transformer nearest to substation bus			
(Lighting load)	112	126	14
(Non-lighting loads)	108	126	18
At 8-volt drop on primary			
(Lighting load)	110	122	12
(Non-lighting load)	108	122	14

3. Basic RUS recommended operating conditions, voltage level and limit values are based on the following:
 - The outgoing substation voltage is regulated by a suitable voltage.
 - The regulator voltage band width setting does not exceed two volts on a 120-volt base.
 - Voltage values used are at the center of the voltage regulator band width.
 - Only sustained voltages apply to these levels and limits. The flicker and variations caused by motor starting, equipment switching, variation of voltage within the voltage regulator band width, and similar short duration variations are not considered.
 - Refer to RUS Bulletin 169-27, *Voltage Regulator Application on Rural Distribution Systems*, for detailed guidelines on voltage regulator installation and appropriate settings for voltage level, bandwidth, time delay, range of regulation, and line drop compensation (LDC).

F. Annual System Losses:

Annual system losses will be monitored and evaluated annually per the guidelines established by the latest RUS Bulletin 45-4.

1. Efforts should be made to limit the annual distribution system losses to 6.5% or less.
2. When there is a more than 1.0 - 1.5% change in losses from one year to the next, efforts are to be made to evaluate the cause. Such efforts should include the following to assure that there is not a metering error with the power supplier or a large power consumer resulting incorrect charges and/or revenue:
 - Check all substations that have had a change in metering equipment over the last 12 - 24 months.
 - Check all new substations that were constructed over the last 12 - 24 months and verify correctness of metering.
 - Check all new or recently revised large power load metering and verify correctness.
3. Line drop compensation (LDC) should be utilized on all substation regulators to improve line voltage swings and reduce overhead transformer no-load losses during off-peak conditions. Line regulators should also to utilize LDC when controls can be satisfactorily applied and monitored.

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4. Purchases of the following distribution equipment should be based on evaluated losses to reduce system losses and to contribute to a higher annual load factor:
 - Consumer overhead transformers
 - Consumer underground transformers
 - Voltage Regulators

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it display a valid OMB control number. The valid OMB control number for this information collection is 0572-0025. The time required to complete this information collection is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing collection of information

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE REVIEW RATING SUMMARY		BORROWER DESIGNATION KY 52																																									
		DATE PREPARED January 30, 2008																																									
Ratings on form are: 0: Unsatisfactory -- No Records 2: Acceptable, but Should be Improved -- See Attached Recommendations NA: Not Applicable 1: Corrective Action Needed 3: Satisfactory -- No Additional Action Required at this Time																																											
PART I. TRANSMISSION and DISTRIBUTION FACILITIES																																											
1. Substations (Transmission and Distribution) <i>(Rating)</i> a. Safety, Clearance, Code Compliance NA b. Physical Conditions: Structure, Major Equipment, Appearance NA c. Inspection Records - Each Substation NA d. Oil Spill Preventior NA 2. Transmission Lines a. Right-of-Way: Clearing, Erosion, Appearance, Intrusions NA b. Physical Condition: Structure, Conductor, Guying NA c. Inspection Program and Records NA 3. Distribution Lines - Overhead a. Inspection Program and Records 3 b. Compliance with Safety Codes: Clearances 3 Foreign Structures 2 Attachments 2 c. Observed Physical Condition from Field Checking: Right-of-Way 3 Other 	4. Distribution - Underground Cable <i>(Rating)</i> a. Grounding and Corrosion Control 3 b. Surface Grading, Appearance 3 c. Riser Pole: Hazards, Guying, Condition 3 5. Distribution Line Equipment: Conditions and Records a. Voltage Regulators 3 b. Sectionalizing Equipment 3 c. Distribution Transformers 3 d. Pad Mounted Equipment Safety: Locking, Dead Front, Barriers 3 Appearance: Settlement, Condition 3 Other e. Kilowatt-hour and Demand Meter Reading and Testing 3																																										
PART II. OPERATIONS and MAINTENANCE																																											
6. Line Maintenance and Work Order Procedures <i>(Rating)</i> a. Work Planning & Scheduling 3 b. Work Backlogs: Right-of-Way Maintenance 3 Poles 3 Retirement of Idle Services 1 Other 7. Service Interruptions a. Average Annual Hours/Consumer by Caus(Complete for each of the previous 5 years) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="text-align: center;">PREVIOUS 5 YEARS (Year)</th> <th style="text-align: center;">POWER SUPPLIER a.</th> <th style="text-align: center;">MAJOR STORM b.</th> <th style="text-align: center;">SCHEDULED c.</th> <th style="text-align: center;">ALL OTHER d.</th> <th style="text-align: center;">TOTAL e.</th> <th style="text-align: center;"><i>(Rating)</i></th> </tr> </thead> <tbody> <tr><td style="text-align: center;">2002</td><td style="text-align: center;">0.29</td><td></td><td style="text-align: center;">0.03</td><td style="text-align: center;">2.01</td><td style="text-align: center;">2.33</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">2003</td><td style="text-align: center;">0.82</td><td style="text-align: center;">81.96</td><td style="text-align: center;">0.22</td><td style="text-align: center;">1.72</td><td style="text-align: center;">84.72</td><td style="text-align: center;">2</td></tr> <tr><td style="text-align: center;">2004</td><td style="text-align: center;">0.25</td><td></td><td style="text-align: center;">0.10</td><td style="text-align: center;">3.15</td><td style="text-align: center;">3.50</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">2005</td><td style="text-align: center;">0.04</td><td></td><td style="text-align: center;">0.06</td><td style="text-align: center;">1.97</td><td style="text-align: center;">2.07</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">2006</td><td style="text-align: center;">0.28</td><td></td><td style="text-align: center;">0.02</td><td style="text-align: center;">1.67</td><td style="text-align: center;">1.97</td><td style="text-align: center;">3</td></tr> </tbody> </table> b. Emergency Restoration Plan 3	PREVIOUS 5 YEARS (Year)	POWER SUPPLIER a.	MAJOR STORM b.	SCHEDULED c.	ALL OTHER d.	TOTAL e.	<i>(Rating)</i>	2002	0.29		0.03	2.01	2.33	3	2003	0.82	81.96	0.22	1.72	84.72	2	2004	0.25		0.10	3.15	3.50	3	2005	0.04		0.06	1.97	2.07	3	2006	0.28		0.02	1.67	1.97	3	8. Power Quality <i>(Rating)</i> a. General Freedom from Complaints 3 9. Loading and Load Balance a. Distribution Transformer Loadin 3 b. Load Control Apparatus NA c. Substation and Feeder Loading 3 10. Maps and Plant Records a. Operating Maps: Accurate and Up-to-Date 3 b. Circuit Diagrams 3 c. Staking Sheets 3
PREVIOUS 5 YEARS (Year)	POWER SUPPLIER a.	MAJOR STORM b.	SCHEDULED c.	ALL OTHER d.	TOTAL e.	<i>(Rating)</i>																																					
2002	0.29		0.03	2.01	2.33	3																																					
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2006	0.28		0.02	1.67	1.97	3																																					
PART III. ENGINEERING																																											
11. System Load Conditions and Losses <i>(Rating)</i> a. Annual System Losses 3.90% 3 b. Annual Load Factor 65.5% 3 c. Power Factor at Monthly Peak 95+% 3 d. Ratios of Individual Substation Annual Peak kW to kVA 3 12. Voltage Conditions a. Voltage Surveys 3 b. Substation Transformer Output Voltage Spread 3	13. Load Studies and Planning <i>(Rating)</i> a. Long Range Engineering Plan 3 b. Construction Work Plan 3 c. Sectionalizing Study 3 d. Load Data for Engineering Studies 3 e. Load Forecasting Data 3																																										

PART IV. OPERATION AND MAINTENANCE BUDGETS						
YEAR	For Previous 2 Years		For Present Year	For Future 3 Years		
	2005 Actual \$ Thousands	2006 Actual \$ Thousands	2007 Budget \$ Thousands	2008 Budget \$ Thousands	2009 Budget \$ Thousands	2010 Budget \$ Thousands
Normal Operation	1,087	1,241	1,225	1,245	1,282	1,321
Normal Maintenance	3,264	2,895	2,606	3,031	3,122	3,216
Additional (Deferred) Maintenance						
Total	4,351	4,136	3,831	4,276	4,404	4,537
14. Budgeting: Adequacy of Budgets for Needed Wor _____ 3 _____ (Rating)						
15. Date Discussed with Board of Directors _____ 2/7/2008 _____ (Date)						
EXPLANATORY NOTES						
ITEM NO.	COMMENTS					
3b.	There are still some telephone poles left standing next to electric poles which need to be removed. Cable TV attachments require constant monitoring and follow-up to ensure code requirements are met.					
6b.	Several idle services were observed and should be removed.					
7a.	There was a devastating ice storm in 2003.					
				TITLE	DATE	
RATED BY:				SYSTEM ENGINEER	01/30/08	
REVIEWED BY:				PRESIDENT & CEO	01/30/08	
REVIEWED BY:				RUS GFR	01/30/08	

SUBSTATION LOAD DATA ~ WINTER 2008/2009 BASE LOAD

No.	Substation	Owner	Primary Ø-Ø kV	Secondary Ø-Ø kV	Operating Ø-Ø kV	1 Trans Capacity ¹ Base KVA	1 Trans Capacity ¹ Full KVA	Units In Use	Units Total	Total Capacity ¹ Full KVA	Total Winter 2009 KVA	2012/13 kW BSI	2012/13 kW ASI	2012/13 % of Rating 98% PF
1	Charters	EKPC	69	25	25	14,000	18,144	1	1	18,144	9,300	13,854	13,820	78%
2	Flemingsburg	EKPC	138	25	25	20,000	25,920	1	1	24,840	12,600	18,762	18,754	77%
3	Hilda # 1	EKPC	69	12.47	12.47	25,000	31,050	1	1	31,050	8,700	12,346	12,345	41%
4	Hilda # 2	EKPC	69	12.47	12.47	25,000	31,050	1	1	31,050	15,500	23,266	23,073	76%
5	Hillsboro	EKPC	69	25	25	14,000	18,144	1	1	18,144	6,300	9,340	9,481	53%
6	Maysville	EKPC	138	25	25	20,000	24,840	1	1	24,840	6,100	8,940	8,884	36%
7	Murphysville	EKPC	69	25	25	11,200	18,144	1	1	18,144	7,900	11,884	11,841	67%
8	Oak Ridge	EKPC	69	25	25	11,200	15,725	1	1	18,144	5,100	7,511	7,663	43%
9	Peasticks	EKPC	69	25	25	11,200	15,725	1	1	18,144	8,300	12,033	12,024	68%
10	Plumbers Landing	EKPC	69	12.47	12.47	11,200	15,725	1	1	18,144	5,000	7,552	7,855	44%
11	Rectorville	EKPC	69	12.47	12.47	3,733	5,242	3	3	18,144	9,000	13,095	13,036	73%
12	Sharkey	EKPC	138	25	25	20,000	24,840	1	1	24,840	9,300	13,886	13,416	55%
13	Snow Hill	EKPC	69	25	25	11,200	15,725	1	1	18,144	6,300	9,337	9,367	53%

FOOTNOTES:

¹ Nameplate Rating With OA/FA/FA Installed

FME AUTO / STEP TRANSFORMER STATIONS ~ 740C 601

SUBSTATION	STATUS	STATION	CWP	#	SIZE (KVA)	PRI VOLT	SEC VOLT	LOAD (KW)	% Load	REMARKS
CHARTERS	EXISTING	ST220438001		3	500	14.4	7.2	1,231	82%	
	EXISTING	ST230765002	~	1	333	14.4	7.2	265	80%	~
	EXISTING	ST230765001	~	1	167	14.4	7.2	144	86%	~
	REMOVE	XFMR53	304	3	333	14.4	7.2	905	91%	
	INSTALL	NEW	304	1	333	14.4	7.2	203	61%	TO SMOOTH ROCK
	INSTALL	NEW	304	1	333	14.4	7.2	134	40%	TO DRY HOLLOW
	INSTALL	NEW	304	1	333	14.4	7.2	185	56%	TO SPY RUN
	EXISTING	AU818806806	~	1	333	14.4	7.2	92	28%	~
	EXISTING	AU66	~	1	333	14.4	7.2	361	108%	~
	EXISTING	AU52	~	1	333	14.4	7.2	334	100%	
	EXISTING	AU54	~	1	333	14.4	7.2	111	33%	~
	REPLACE	AU64	~	1	167	14.4	7.2	308	184%	CHANGE TO 333 KVA
	REMOVE	XFMR52	303	3	333	14.4	7.2	822	82%	~
	INSTALL	NEW	303	1	333	14.4	7.2	230	69%	INDIAN CREEK
	INSTALL	NEW	303	1	333	14.4	7.2	116	35%	KY 559
	EXISTING	AU70	~	3	333	14.4	7.2	1,376	138%	~
	REMOVE	XFMR51	300	1	333	14.4	7.2	576	173%	
	INSTALL	NEW	300	1	333	14.4	7.2	298	89%	KY 57
	EXISTING	ST210428001	~	1	333	14.4	7.2	264	79%	~
	EXISTING	ST210428002		1	333	14.4	7.2	191	57%	
	EXISTING	XFMR47	~	3	333	14.4	7.2	920	92%	~
FLEMINGSBURG	EXISTING	AU39	333	1	167	14.4	7.2	173	104%	REMOVE LOAD
	EXISTING	AU30	~	1	333	14.4	7.2	154	46%	~
	REMOVE	AU29	305	1	333	14.4	7.2	416	125%	~
	INSTALL	NEW	305	1	333	14.4	7.2	273	82%	TEA RUN RD
	EXISTING	AU43	~	1	333	14.4	7.2	338	102%	~
	EXISTING	AU45	~	1	333	14.4	7.2	227	68%	~
	EXISTING	AU31	~	1	333	14.4	7.2	195	59%	~
	EXISTING	AU44	~	1	333	14.4	7.2	484	145%	~
	REMOVE	AU36	307	3	1,000	14.4	7.2	4,256	142%	~
	INSTALL	NEW	307	1	500	14.4	7.2	432	86%	MAMA'S KITCHEN AREA
	INSTALL	NEW	307	1	500	14.4	7.2	580	116%	KENDALL LN
	INSTALL	NEW	307	1	333	14.4	7.2	262	79%	FLEMING CK
	INSTALL	NEW	307	1	333	14.4	7.2	388	117%	PECKS RIDGE / ENERGY RD
	INSTALL	NEW	307	1	333	14.4	7.2	229	69%	THREE MILE
	INSTALL	NEW	307	1	333	14.4	7.2	304	91%	PECKS RIDGE

FME AUTO / STEP TRANSFORMER STATIONS ~ 740C 601

SUBSTATION	STATUS	STATION	CWP	#	SIZE (KVA)	PRI VOLT	SEC VOLT	LOAD (KW)	% Load	REMARKS
	REMOVE	AU34	308	1	333	14.4	7.2	459	138%	~
	EXISTING	AU35	~	1	1,000	14.4	7.2	585	59%	~
	EXISTING	AU33	~	3	1,000	14.4	7.2	2,907	97%	~
	EXISTING	AU32	~	3	1,000	14.4	7.2	0	0%	~
HILLSBORO	EXISTING	AU3	329	1	333	14.4	7.2	566	170%	LOAD TRANSFER
	EXISTING	AU4	~	3	1,000	14.4	7.2	0	0%	~
	EXISTING	AU18	~	1	333	14.4	7.2	289	87%	~
	REMOVE	ST320774001	313	3	1,000	7.2	14.4	2,066	69%	~
	INSTALL	NEW	313	1	333	14.4	7.2	270	81%	BETHAL
	INSTALL	NEW	313	1	333	14.4	7.2	180	54%	LITTLE FLAT LEADFORD
	INSTALL	NEW	313	1	333	14.4	7.2	259	78%	CASSIDY CREEK
	INSTALL	NEW	313	1	333	14.4	7.2	184	55%	DIXIE HWY
	EXISTING	ST320763001	313	1	167	14.4	7.2	102	61%	~
	EXISTING	AU2030824619	~	3	1,000	14.4	7.2	1,348	45%	~
	EXISTING	ST330762001	~	3	1,000	14.4	7.2	1,328	44%	~
MAYSVILLE	EXISTING	AU76	314	1	333	14.4	7.2	543	163%	LOAD TRANSFER
	EXISTING	AU74	~	1	333	14.4	7.2	339	102%	~
	REMOVE	AU77	314	1	167	14.4	7.2	130	78%	~
	EXISTING	AU78	~	1	333	14.4	7.2	284	85%	~
MURPHYSVILLE	REMOVE	ST200553001	317	1	333	14.4	7.2	879	264%	~
	INSTALL	NEW	317	1	333	14.4	7.2	390	117%	WARDS PIKE
	EXISTING	AU100	~	1	333	14.4	7.2	235	71%	~
	EXISTING	AU80	~	1	167	14.4	7.2	205	123%	~
	REPLACE	AU87	~	1	167	14.4	7.2	234	140%	CHANGE TO 333 KVA
	EXISTING	ST240429001	~	1	333	14.4	7.2	456	137%	~
	EXISTING	AU102	~	1	333	14.4	7.2	283	85%	~
	EXISTING	AU88	~	1	333	14.4	7.2	274	82%	~
	EXISTING	ST240426001	~	1	333	14.4	7.2	151	45%	~
	REMOVE	AU91	316	1	333	14.4	7.2	432	130%	~
	INSTALL	NEW	316	1	333	14.4	7.2	223	67%	HAMILTON RD
	INSTALL	NEW	316	1	167	14.4	7.2	151	90%	OAKLAND RD
	EXISTING	AU98	~	3	333	14.4	7.2	497	50%	~
OAK RIDGE	REPLACE	AU51	~	3	333	14.4	7.2	1,408	141%	CHANGE TO 3 500 KVA'S
	EXISTING	AU-829774792	~	1	167	14.4	7.2	204	122%	~
	EXISTING	AU59	~	1	333	14.4	7.2	186	56%	~
	REMOVE	ST260427001	333	1	167	14.4	7.2	107	64%	~

FME AUTO / STEP TRANSFORMER STATIONS ~ 740C 601

SUBSTATION	STATUS	STATION	CWP	#	SIZE (KVA)	PRI VOLT	SEC VOLT	LOAD (KW)	% Load	REMARKS
	EXISTING	ST260656001	~	2	333	14.4	7.2	583	88%	~
	EXISTING	AU40	~	1	500	14.4	7.2	515	103%	~
	REMOVE	AU8	319	1	333	14.4	7.2	592	178%	~
	EXISTING	AU7	~	1	167	14.4	7.2	189	113%	~
PEASTICKS	REMOVE	AU9	320	3	333	14.4	7.2	1,591	159%	~
	INSTALL	NEW	320	1	500	14.4	7.2	515	103%	KY 36
	INSTALL	NEW	320	1	333	14.4	7.2	263	79%	MCCARTY BRANCH
	EXISTING	AU13	~	3	333	14.4	7.2	840	84%	~
	EXISTING	AU14	~	1	333	14.4	7.2	322	97%	~
	EXISTING	AU21	~	1	333	14.4	7.2	284	85%	~
	EXISTING	AU20	~	1	167	14.4	7.2	126	75%	~
	EXISTING	AU22	~	1	167	14.4	7.2	177	106%	~
	EXISTING	AU-795824492	~	1	333	14.4	7.2	261	78%	~
	EXISTING	ST380332001	~	1	167	14.4	7.2	202	121%	~
	REMOVE	ST370878001	322	1	333	14.4	7.2	688	207%	~
	INSTALL	NEW	322	1	167	14.4	7.2	139	83%	FLAT CREEK
	REPLACE	AU12	~	1	167	14.4	7.2	320	192%	CHANGE TO 333 KVA
	EXISTING	AU11	~	1	333	14.4	7.2	404	121%	~
	REPLACE	AU15	~	1	167	14.4	7.2	313	187%	CHANGE TO 333 KVA
	EXISTING	AU10	~	3	1,000	14.4	7.2	2,994	100%	~
PLUMBERS LANDING	EXISTING	ST330552001	~	3	1,000	14.4	7.2	0	0%	TIE-AUTOS; COULD BE REMOVED
RECTORVILLE	EXISTING	AU69	~	3	1,500	7.2	14.4	5,936	132%	~
	EXISTING	AU95	~	1	167	14.4	7.2	0	0%	~
	EXISTING	ST200427001	~	1	333	14.4	7.2	242	73%	~
SHARKY	EXISTING	ST390216001	325 / 332	3	1,000	14.4	7.2	4,895	163%	REMOVING LOAD
	EXISTING	ST390649001	~	1	1,000	14.4	7.2	17	2%	~
	EXISTING	AU2	~	1	333	14.4	7.2	235	71%	~
	EXISTING	ST390867001	~	1	333	14.4	7.2	256	77%	~
SNOW HILL	EXISTING	ST250115001	~	1	167	14.4	7.2	146	87%	~
	EXISTING	AU83	~	1	167	14.4	7.2	153	92%	~
	EXISTING	ST300209001	~	1	333	14.4	7.2	361	108%	~
	EXISTING	AU1951123935	~	1	1,867	14.4	7.2	973	52%	~
	REPLACE	AU49	~	1	167	14.4	7.2	238	143%	CHANGE TO 333 KVA
	EXISTING	AU47	~	1	333	14.4	7.2	451	135%	FUTURE CONVERTING
	REPLACE	AU26	~	1	333	14.4	7.2	548	165%	CHANGE TO 500 KVA
	REMOVE	AU25	336	1	333	14.4	7.2	483	145%	~

FME AUTO / STEP TRANSFORMER STATIONS ~ 740C 601

SUBSTATION	STATUS	STATION	CWP	#	SIZE (KVA)	PRI VOLT	SEC VOLT	LOAD (KW)	% Load	REMARKS
	EXISTING	ST360439001	~	1	333	14.4	7.2	394	118%	~
	EXISTING	ST360429001	~	1	333	14.4	7.2	284	85%	~

Large Consumers > Than 300 KW

Name	Location	KWH	Account Demand (KW)	Billing Demand (KW)
KROGER	400332186	172,080	314	314
FOOD LION LLC SITE #780	400332131	149,160	335	335
TOYO SEAT USA CORP	260646052	117,040	351	351
ROWAN CO BD OF EDUCATION	400332183	131,520	354	354
B & W PALLET CO	400322036	68,480	364	364
MAYSVILLE UTILITY COMM	140553025	189,600	378	378
ROWAN CO BD OF EDUCATION	400332235	87,000	394	394
LOWE'S HOME CENTERS INC#1808	400332104	179,000	397	397
FLEMING CO GYM	260765075	175,600	432	432
GREEN TREE FOREST PROD	330646066	93,000	459	459
GREEN TOKAI CO LTD	190209101	140,000	460	460
FLEMING COUNTY HOSPITAL	260765223	266,400	487	487
TOYO SEAT USA CORP	260646021	183,600	488	488
BLUELICKS STATE PARK	300659019	161,160	518	518
MILLWORKS HAROLD WHITE	400322085	105,600	588	588
VALLEY VIEW HARDWOODS INC	400332078	144,800	635	635
GREEN TOKAI CO LTD	190209100	202,000	642	642
WALMART (MOREHEAD)	190209100	426,000	653	653
NORTH CONTOURS	220438233	156,200	668	668
MITSUBISHI ELECTRIC MFG	190209103	777,327	1,515	1,515
FAMILY DOLLAR SERVICES	390437020	976,800	1,882	1,882
GUARDIAN INDUSTRIES CORP	400322153	3,893,879	6,599	8,087
DRAVO LIME CO	200438043	11,246,839	14,095	16,027
TENNESSEE GAS PIPELINE	340866015	2,585,031	25,000	25,000
INLAND CONTAINER CORP	140553033	8,886,929	13,903	29,477

OUTAGE DATA: AVERAGE ANNUAL HOURS OUT PER CUSTOMER

YEAR	POWER SUPPLIER	MAJOR STORM	SCHED.	OTHER	TOTAL
2005	0.04	0.00	0.06	1.97	2.07
2006	0.28	0.00	0.02	1.67	1.97 *
2007	0.00	0.00	0.02	0.74	0.76
2008	0.00	0.00	0.00	0.89	0.89
2009*	0.13	68.12	0.22	0.70	69.18

5YR AVG	0.09	1%	13.62	91%	0.06	0%	1.19	8%	14.97
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**Ice storm in January of 2009*

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 300 Scope: 1PH TO 3PH AND VOLTAGE CONV Estimated Cost: \$172,000

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
CHARTERS	1	CO22901	2.6	1	4 ACSR	3	1/0 ACSR
				1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

KY 57 TOWARDS CONCORD

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
83	116	\$5,623	13.5	123	\$2,433	\$3,190

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 301

Scope: 3PH RE-CONDUCTOR

Estimated Cost: \$72,000

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
CHARTERS	2	CO19949	1.5	3	6 ACWC	3	1/0 ACSR

LOCATION OF PROJECT

KY 59 / FEEDS TOWARDS ROCK RUN

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B8 AGED COPPER CONDUCTOR

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
13.6	114.2	\$2,365	13.6	117.8	\$2,176	\$189

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 302

Scope: 1PH TO 3PH

Estimated Cost: \$140,400

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
CHARTERS	2	CO7053	3.6	1	2 ACSR	3	2 ACSR

LOCATION OF PROJECT

LAUREL RD

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- D3 INCREASE RELIABILITY
- F1 MUCH GREATER THAN AVERAGE LINE LOSSES
- B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
63.2	117.8	\$4,998	20	120	\$2,249	\$2,749

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 303

Scope: VOLTAGE CONVERSION

Estimated Cost: \$172,300

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
CHARTERS	2	CO18035	2.7	3	1/0 ACSR	3	1/0 ACSR
			15.8	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

INDIAN CREEK

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE
- D3 INCREASE RELIABILITY
- B6 EXCESSIVE VOLTAGE DROP

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
39.2	105	\$14,033	19.1	116	\$3,679	\$10,354

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 304 Scope: 1PH TO 3PH AND VOLTAGE CONV Estimated Cost: \$46,200

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
CHARTER	4	CO19639	0.7	1	1/0 ACSR	3	1/0 ACSR
			2.5	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

KINNEY RD / AA HWY. FEEDS DRY HOLLOW
SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

C3 AUTO / STEP BANK OVERLOAD
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOSSES (\$/YR)
41.3	120.4	\$2,291	20.6	121.4	\$667	\$1,624

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 305 Scope: 1PH TO 2PH AND VOLTAGE CONV Estimated Cost: \$42,400

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING		PROPOSED	
				PH & CONDUCTOR	PH & CONDUCTOR		
FLEMINGS- BURG	1	CO14319	0.5	1	4 ACSR	2	2 ACSR
			2.8	1	2 ACSR	1	2 ACSR

LOCATION OF PROJECT

PIKE BLUFF / TEA RUN

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
56.9	121	\$1,892	14.1	121.0	\$971	\$921

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 307

Scope: 3PH & 1PH VOLTAGE CON

Estimated Cost: \$285,300

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
FLEMINGS- BURG	3	CO15396	10.1	3	4/0 ACSR	3	4/0 ACSR
			14.2	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

TILTON

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
D4 PROVIDE ALTERNATE FEED

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOSSES (\$/YR)</u>
190	113.5	\$50,536	93	123	\$14,768	\$35,768

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 309

Scope: 1PH UPGRAGE

Estimated Cost: \$5,500

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
HILDA	2	CO896	0.2	1	2 ACSR	1	2 ACSR

LOCATION OF PROJECT

POND LICK

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

D3 INCREASE RELIABILITY

B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>(\$/YR)</u>
54.8	117.5	\$987	33.1	118.4	\$308	\$679

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 310

Scope: 1PH VOLTAGE CONVERSION

Estimated Cost: \$34,400

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
HILDA	4	CO2526	4.3	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

BULL FORK

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
D4 PROVIDE ALTERNATE FEED

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENT			NET
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOSSES (\$/YR)
41.5	112.4	\$1,429	20.2	123	\$369	\$1,060

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 311

Scope: 1PH TO 2PH CONVERSION

Estimated Cost: \$8,820

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR	PROPOSED PH & CONDUCTOR
HILDA	4	C0966	0.21	1 6 ACWC	2 1/0 ACSR

LOCATION OF PROJECT

PENNINGTON FLAT

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- D3 INCREASE RELIABILITY
- B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOSSES (\$/YR)
50.4	119	\$453	25.1	120	\$272	\$181

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 313

Scope: 7.2 TO 14.4 KV VOLTAGE CONV

Estimated Cost: \$307,050

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
HILLSBORO	4	CO2033225 829	10.1	3	2 ACSR	3	2 ACSR
			27.7	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

SHERBURNE

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
94	110	\$41,260	46.3	118.9	\$12,850	\$28,410

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 314

Scope: 1PH TO 3PH AND VOLTAGE CONV

Estimated Cost: \$231,000

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
MAYSVILLE	3	CO24880	4.5	1	4 ACSR	3	1/0 ACSR
			3	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

MAYSVILLE / KY 8 ALONG RIVER

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOAD CONDUCTOR

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOSSES (\$/YR)</u>
113	110	\$26,779	26.5	122.2	\$9,145	\$17,634

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 316

Scope: 1PH TO 2PH AND VOLTAGE CONV

Estimated Cost: \$107.000

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
MURPHYS-VILLE	2	CO27653	0.75	1	6 ACWC	3	1/0 ACSR
			12.4	1	6 ACWC	1	6 ACWC

LOCATION OF PROJECT

OAKLAND RD / HAMILTON RD

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
58.6	118.2	\$2,575	14.9	123.1	\$604	\$1,971

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 317

Scope: 1PH TO 3PH AND VOLTAGE CONV

Estimated Cost: \$159,725

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
MURPHYS-VILLE	3	CO28663	1.6	1	6 ACWC	3	1/0 ACSR
			6	1	6 ACWC	1	2 ACSR

LOCATION OF PROJECT

PARKER LN / MILL CREEK

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B8 AGED COPPER CONDUCTOR

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
118.4	116	\$18,692	18.2	124	\$1,536	\$17,156

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 319

Scope: 7.2 to 14.4 kV Voltage Conv

Estimated Cost: \$136,800

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
OAK RIDGE	3	CO7898	17.1	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

HESTER RIDGE

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE
B6 EXCESSIVE VOLTAGE DROP

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
77.3	115.7	\$8,120	39.2	123.1	\$2,286	\$5,834

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 320

Scope: 3PH VOLTAGE CONVERSION

Estimated Cost: \$38,650

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
PEASTICKS	2	CO8529	2.1	3	1/0 ACSR	3	1/0 ACSR
			2.6	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

PICKSHEIN RD / KY 36

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
70.9	120	\$8,041	35.3	121.6	\$4,047	\$3,994

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 322

Scope: 7.2 TO 14.4 VOLTAGE CONV

Estimated Cost: \$39,200

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
PEASTICKS	4	CO17046	4.9	1	2 ACSR	1	2 ACSR

LOCATION OF PROJECT

SALTWELL RD

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
70.4	113.8	\$2,864	35.5	119.6	\$693	\$2,171

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

**2011 ~ 2012 CONSTRUCTION WORK PLAN
DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW**

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 323

Scope: 1PH LOAD TRANSFER

Estimated Cost: \$11,000

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
PLUMMERS LANDING	1	CO7641	0.4	1	4 ACSR	1	2 ACSR

LOCATION OF PROJECT

WOOLY RD

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- D4 PROVIDE ALTERNATE FEED
- D3 INCREASE RELIABILITY
- F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
70.2	118	\$3,285	41.4	118.4	\$1,744	\$1,541

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 324

Scope: 1PH TO 3PH

Estimated Cost: \$15,600

TYPE OF PROPOSED CONSTRUCTION

SUB	CKT	BEGIN SECTION	MILES	EXISTING PH & CONDUCTOR		PROPOSED PH & CONDUCTOR	
PLUMMERS LANDING	1	CO13000	0.4	1	2 ACSR	3	2 ACSR

LOCATION OF PROJECT

GREENBROOK SUBDIV.

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE
- D3 INCREASE RELIABILITY

RESULTS OF PROPOSED CONSTRUCTION

FUTURE SYSTEM BEFORE IMPROVEMENTS			FUTURE SYSTEM AFTER IMPROVEMENTS			NET LOSSES (\$/YR)
LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	LOAD AMPS	VOLT DROP	LOSSES (\$/YR)	
66.7	117	\$654	22.0	121.4	\$218	\$436

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 325

Scope: 1PH TO 3PH

Estimated Cost: \$114,000

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
PLUMMERS LANDING	2	CO4747	1.5	1	4 ACSR	3	336 ACSR

LOCATION OF PROJECT

KY 32 / WEAVER RD.

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

D4 PROVIDE ALTERNATE FEED TO MAJOR LOADS
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOSSES (\$/YR)</u>
46.7	115	\$6,070	39	121.5	\$918	\$5,152

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 327

Scope: 1PH TO 3PH

Estimated Cost: \$14,720

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>	<u>PROPOSED PH & CONDUCTOR</u>
RECTORVILLE	3	CO22264	0.32	1 4 ACSR	3 1/0 ACSR

LOCATION OF PROJECT

KY 57 / TOLLESBORO

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- D3 INCREASE RELIABILITY
- F1 MUCH GREATER THAN AVERAGE LINE LOSSES
- B7 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
67.3	114	\$696	22.4	118.4	\$300	\$396

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 328

Scope: 1PH TO 3PH

Estimated Cost: \$47,120

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>	<u>PROPOSED PH & CONDUCTOR</u>
RECTORVILLE	3	CO7641	0.62	1 6 HDCU	3 336 ACSR

LOCATION OF PROJECT

KY 57 / BURTONVILLE

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

- D4 SECTIONALIZING CONCERNS WITH HEAVILY LOADED 1PH LINE
- D3 INCREASE RELIABILITY
- F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
59.2	117	\$1,658	20.5	118.5	\$785	\$873

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 329

Scope: 1PH TO 3PH

Estimated Cost: \$38,180

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>	<u>PROPOSED PH & CONDUCTOR</u>
SHARKEY	1	CO1686	0.83	1 4 ACSR	3 1/0 ACSR

LOCATION OF PROJECT

KY 801 / FARMERS

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B7 SECTIONALIZING AND RELIABILITY ISSUES
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
53.5	121	\$1,024	19.3	122.6	\$445	\$579

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 330

Scope: 1PH TO 3PH

Estimated Cost: \$36,440

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
SHARKEY	4	CO17308	0.5	1	2 ACSR	3	1/0 ACSR

LOCATION OF PROJECT

ELLINGTON LOOP

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B7 SECTIONALIZING AND RELIABILITY ISSUES
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
63.8	121	\$468	13.5	123.7	\$118	\$350

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 332

Scope: 1PH UPGRADE

Estimated Cost: \$41,250

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
HILLSBORO	4	CO5078	1.5	1	4 ACSR	1	2 ACSR

LOCATION OF PROJECT

MAXEY FLAT

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B7 SECTIONALIZING AND RELIABILITY ISSUES
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B6 EXCESSIVE VOLTAGE DROP

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
139	111	\$15,267	86.4	119	\$6,859	\$8,408

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

3 PH CONVERSION

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 333

Scope: 1PH TO 3PH

Estimated Cost: \$164,000

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
OAK RIDGE	3	CO25666	0.9	1	4 ACSR	3	1/0 ACSR
			2.7	1	6 ACWC	1	2 ACSR

LOCATION OF PROJECT

TAYLOR MILL

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B7 SECTIONALIZING AND RELIABILITY ISSUES
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES
B8 AGED COPPER CONDUCTOR

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOSSES (\$/YR)</u>
16.3	121	\$551	6.7	121.2	\$120	\$431

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

FLEMING ~ MASON ENERGY COOPERATIVE

Kentucky 52 Fleming
Flemingsburg, Kentucky

2011 ~ 2012 CONSTRUCTION WORK PLAN DISTRIBUTION LINE CONSTRUCTION PROJECT REVIEW

740C Code: 336

Scope: 1PH 25 KV CONVERSION

Estimated Cost: \$80,000

TYPE OF PROPOSED CONSTRUCTION

<u>SUB</u>	<u>CKT</u>	<u>BEGIN SECTION</u>	<u>MILES</u>	<u>EXISTING PH & CONDUCTOR</u>		<u>PROPOSED PH & CONDUCTOR</u>	
SNOW HILL	1	CO17308	10	1	4 ACSR	1	4 ACSR

LOCATION OF PROJECT

LOCUST GROVE

SEE ATTACHED CIRCUIT DIAGRAM FOR DETAILS

REASON(S) FOR PROPOSED CONSTRUCTION (SDOC ITEM #)

B6 EXCESSIVE VOLTAGE DROP
D3 INCREASE RELIABILITY
F1 MUCH GREATER THAN AVERAGE LINE LOSSES

RESULTS OF PROPOSED CONSTRUCTION

<u>FUTURE SYSTEM BEFORE IMPROVEMENTS</u>			<u>FUTURE SYSTEM AFTER IMPROVEMENTS</u>			<u>NET LOSSES (\$/YR)</u>
<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	<u>LOAD AMPS</u>	<u>VOLT DROP</u>	<u>LOSSES (\$/YR)</u>	
75	101	\$5,177	36.1	117	\$1,167	\$4,010

ALTERNATE CORRECTIVE PLAN(S) INVESTIGATED

PROPOSED PROJECT IS CONSISTENT WITH CURRENT LRSS

KY 52 2011-2012 WORK PLAN

740c - ENVIRO CHECKLIST

26-Jan-10

1. DISTRIBUTION
 100 a. New Line: (Excluding Tie-Lines)
 Construction Consumers Miles
 Underground _____ _____
 Overhead 660 32
 Total Consumers: 660 Total Miles 32

200 b. New Tie-Lines
 Line Designation Miles

300 c. Conversion and Line Changes
 Line Designation Miles
 300-336 Line Conversions 173.6

400 d. New Substations, Switching Stations, Metering Points, etc.
 Station Designation kVA kV to kV

500 e. Substation, Switching Station, Metering Point Changes
 Station Designation Description of Changes

600 f. Miscellaneous Distribution Equipment
 601 (1) Transformers and Meters
 Con: Transformers
 Underground
 Overhead
 Subtotal code 601 . . . (included in total of all 600 codes below)

602 (2) Sets of Service Wires to increase Capacity
 603 (3) Sectionalizing Equipment
 604 (4) Regulators
 605 (5) Capacitors
 606 (6) Pole Replacements

608 _____

611 (8) Line Relocation
 700 g. Other Distribution Items
 701 (1) Engineering Fees
 702 (2) Security Lights
 703 (3) Reimbursement of General Funds (see attached)
 704 (4) AMR

800 2. Transmission
 a. New Line
 Line Designation Wire Size

Was project approved in a previous CWP or Amendment? If yes, provide status if no provide anticipated classification (per 7CFR1794)	Will work be entirely within existing ROW, generating station, industrial park or substation fencing? If no, see next column. If yes is SHPO concurrence required for work? Is yes, are T&E Species or Critical Habitat located within the county? Are Federal Lands, floodplains or wetlands crossed?	For substations, will the new disturbance be <1 acre, <5 acres, or >5 acres? For lines, provide the voltage, length and ROW width.	Does the project require preparation of an Environmental Assessment of Environmental Impact Statement? If yes, the environmental work must be approved prior to application or removed from loan.
NA	NA		
NA	NA		
	Existing ROW - Yes SHPO - NA T&E Species - NA		
NA	Federal lands, floodplains, wetlands - NA		

NA			
NA			

NA			
NA	Existing ROW - Yes SHPO - NA T&E Species - NA Federal lands, floodplains, wetlands - NA		
NA	Existing ROW - Yes SHPO - NA T&E Species - NA Federal lands, floodplains, wetlands - NA		

NA			

900 b. New Substations, Switching Stations, etc.

1000 c. Line and Station Changes

1100 d. Other Transmission Items

- (1) R/W Procurement _____
- (2) Engineering Fees _____
- (3) Reimbursement of General Funds (see schedule)
- (4) _____

1200 3. GENERATION (including Step-up Station at Plant)

- a. Fuel _____ Nameplate Rating _____
- b. _____

1300 4. HEADQUARTERS FACILITIES

- a. New or additional Facilities _____
- b. _____

1400 5. ACQUISITIONS

- a. _____ Consumers _____ Miles
- b. _____

1500 6. ALL OTHER

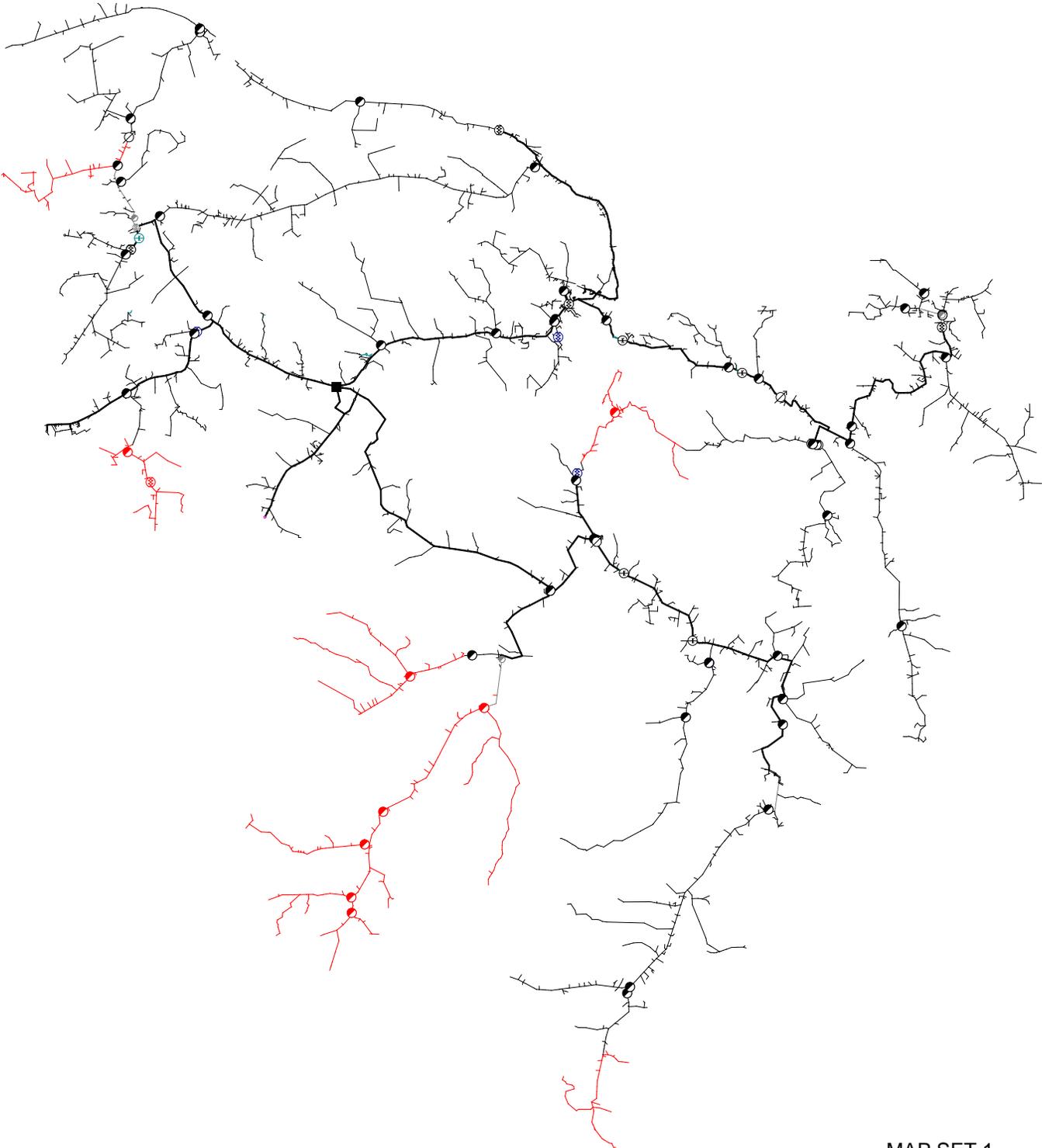
- a. _____
- b. _____

MAP SET 1

PROPOSED WINTER 2012 / 2013

(WITHOUT RECOMMENDED SYSTEM IMPROVEMENTS)

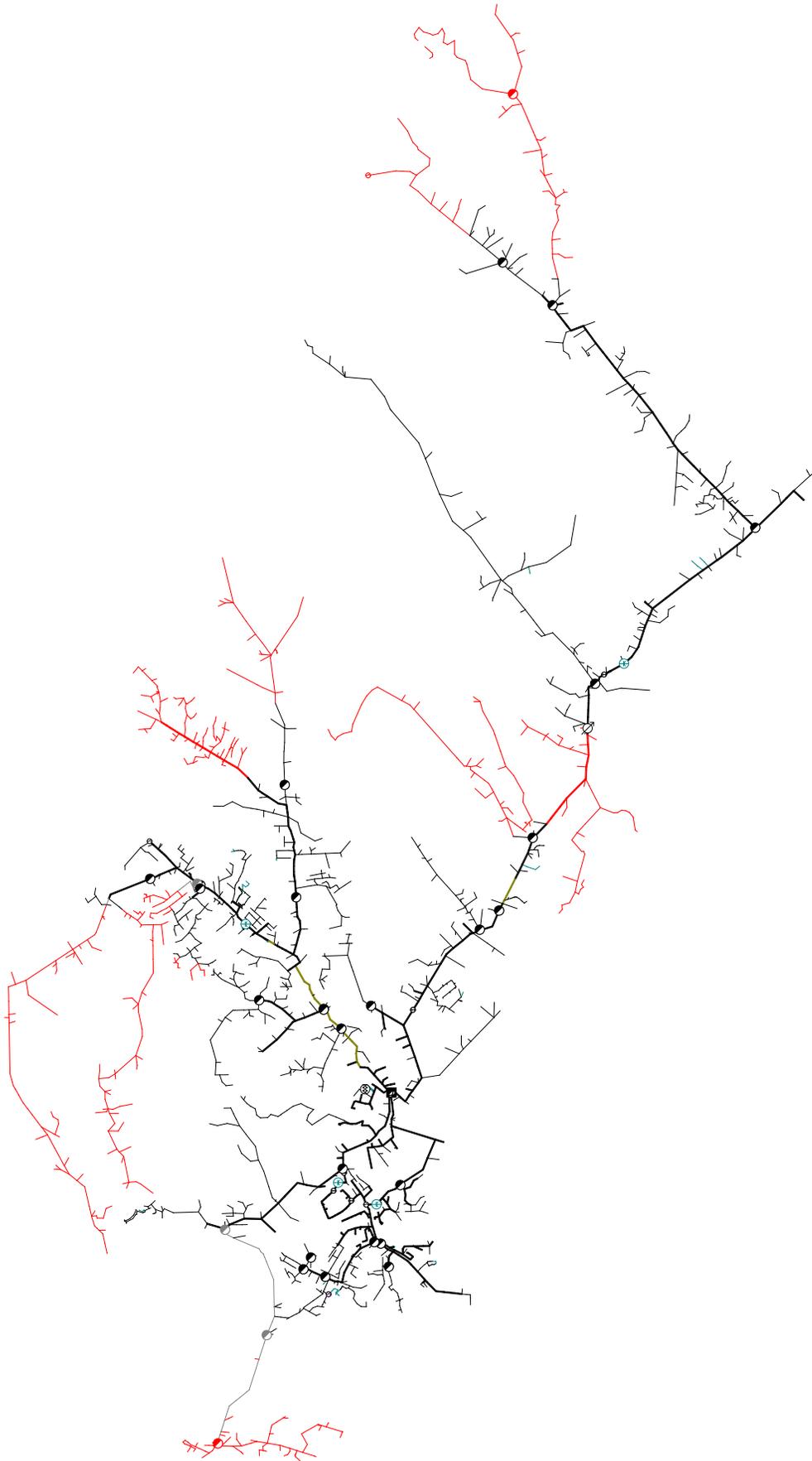
CHARTERS SUBSTATION



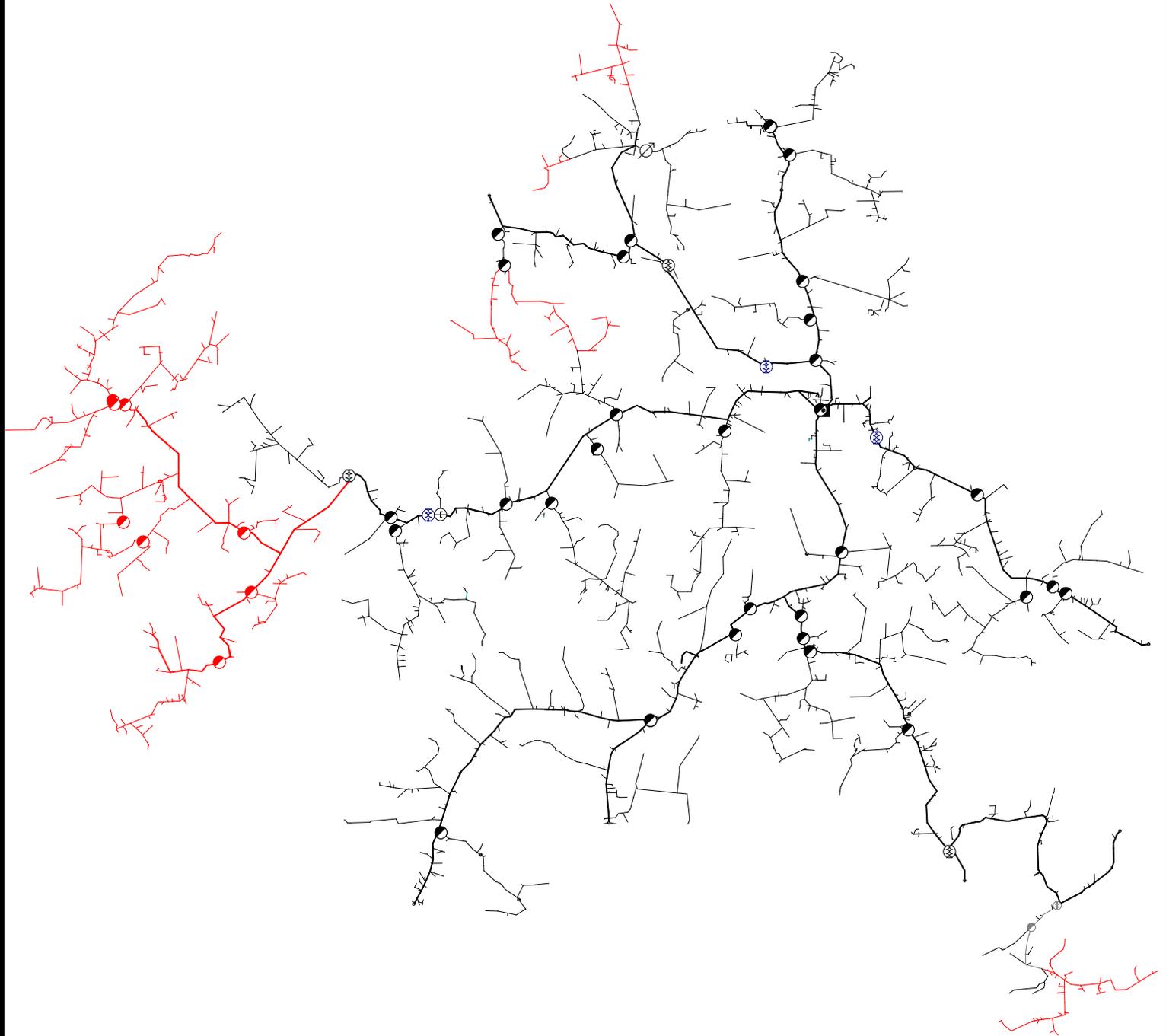
FLEMINGSBURG SUBSTATION



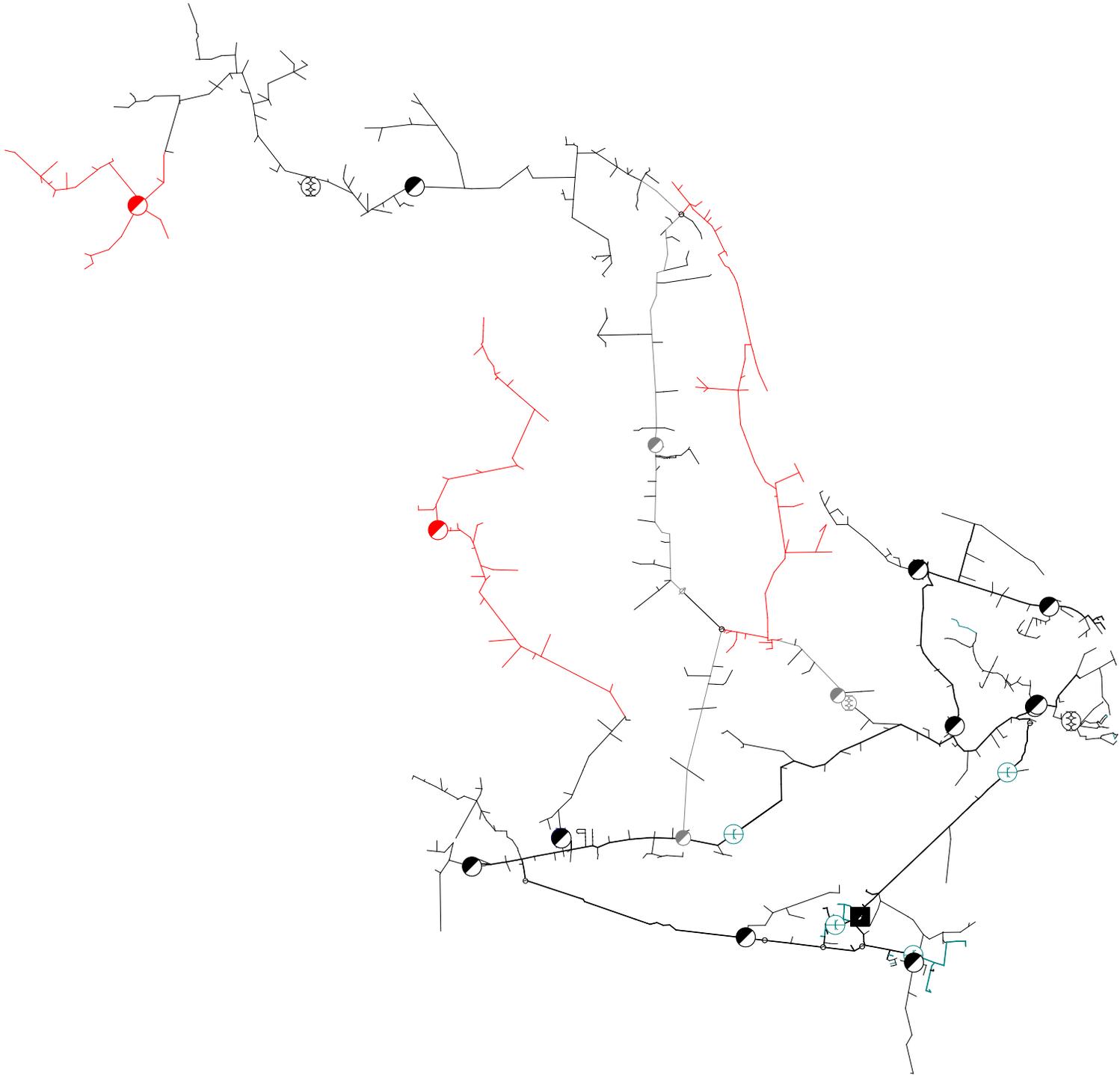
HILDA SUBSTATION



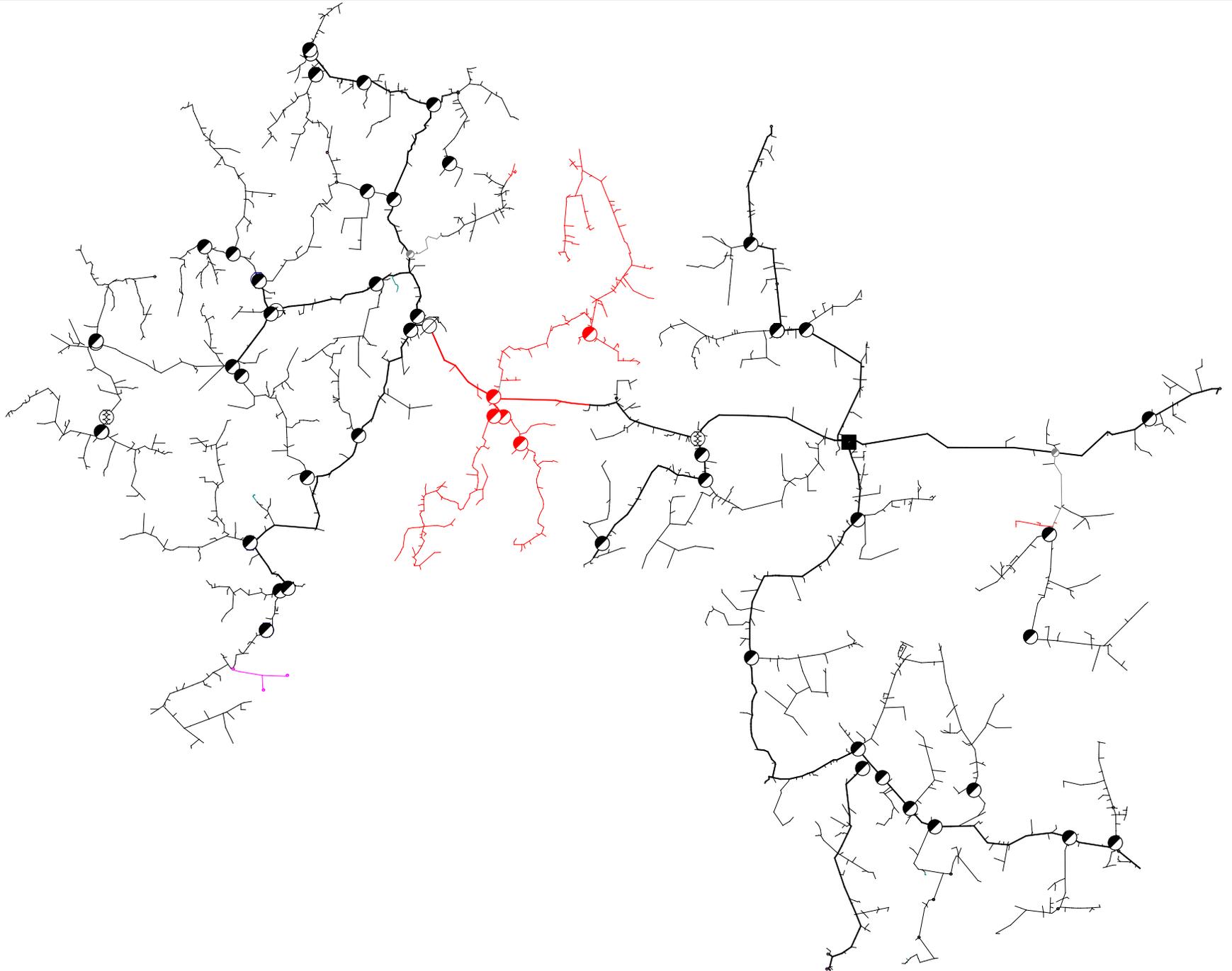
HILLSBORO SUBSTATION



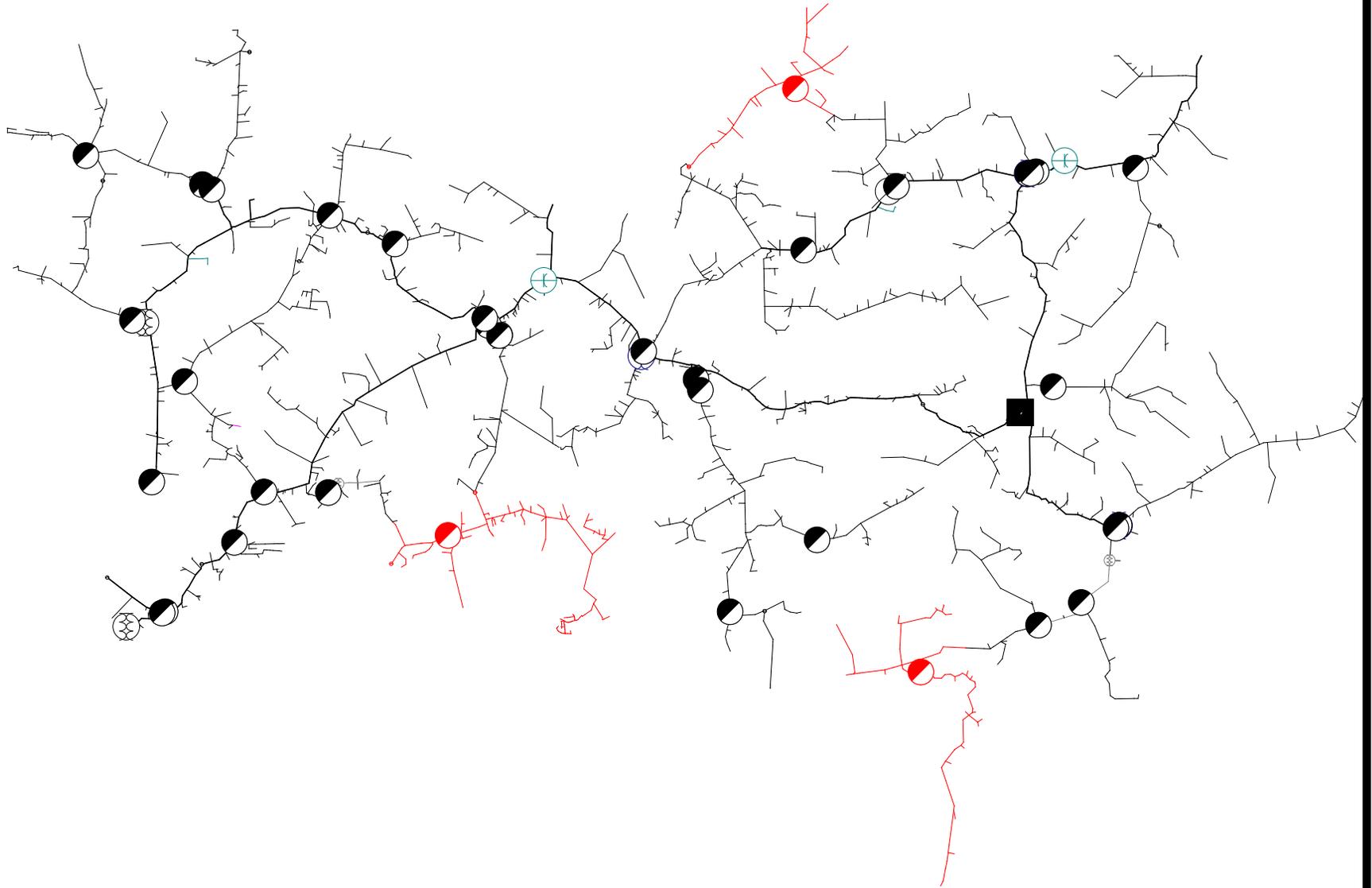
MAYSVILLE SUBSTATION



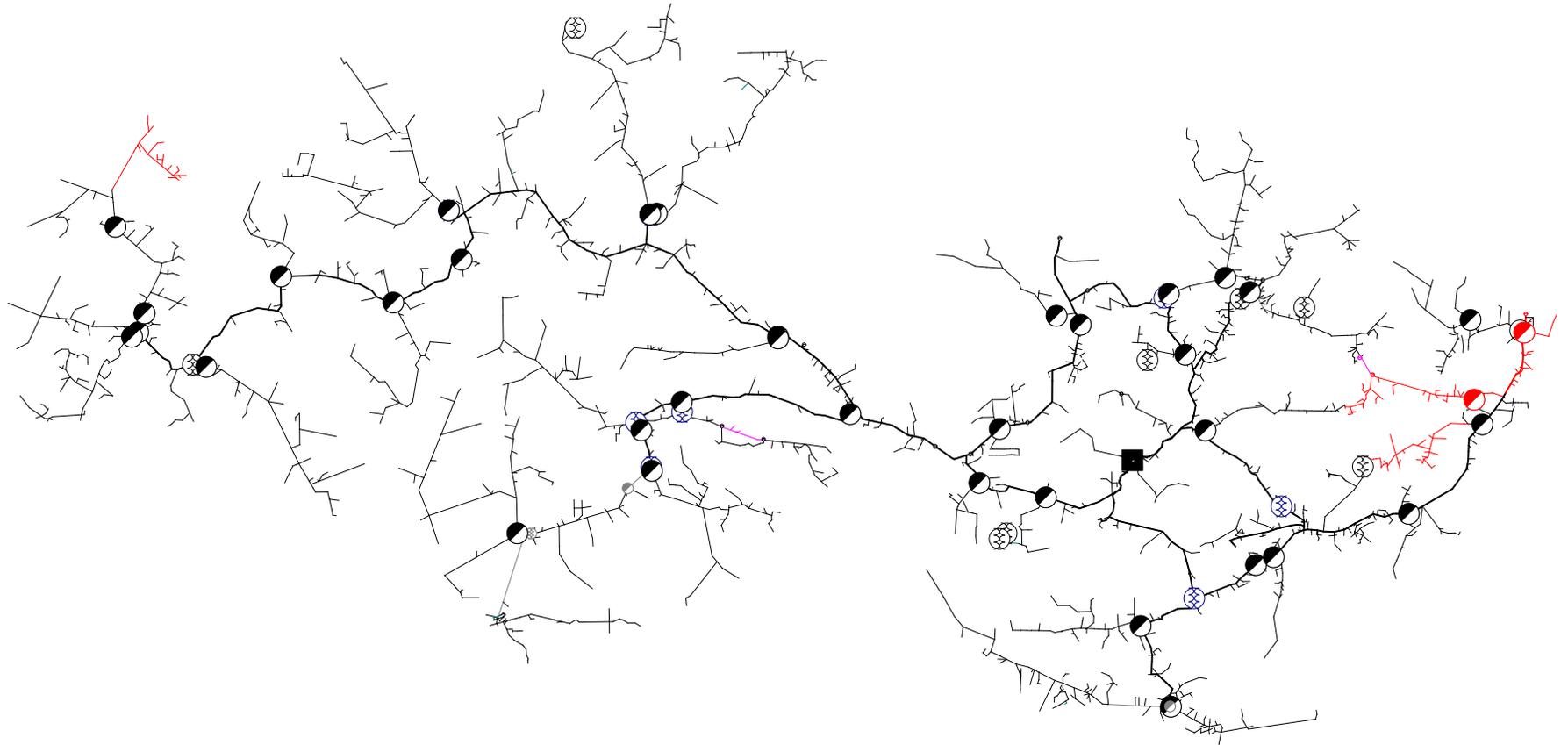
MURPHYSVILLE SUBSTATION



OAK RIDGE SUBSTATION



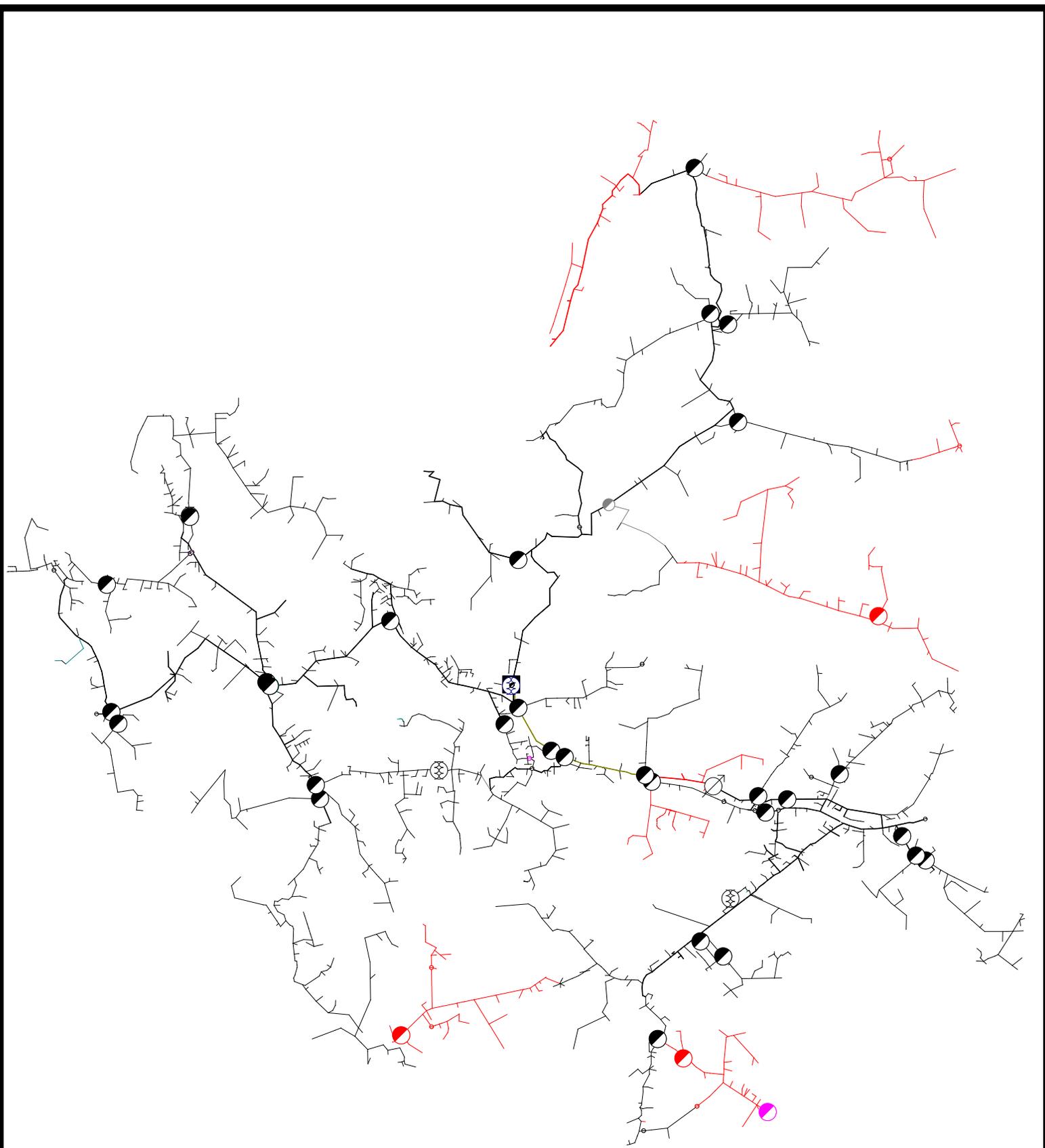
PEASTICKS SUBSTATION



PLUMMERS LANDING SUBSTATION



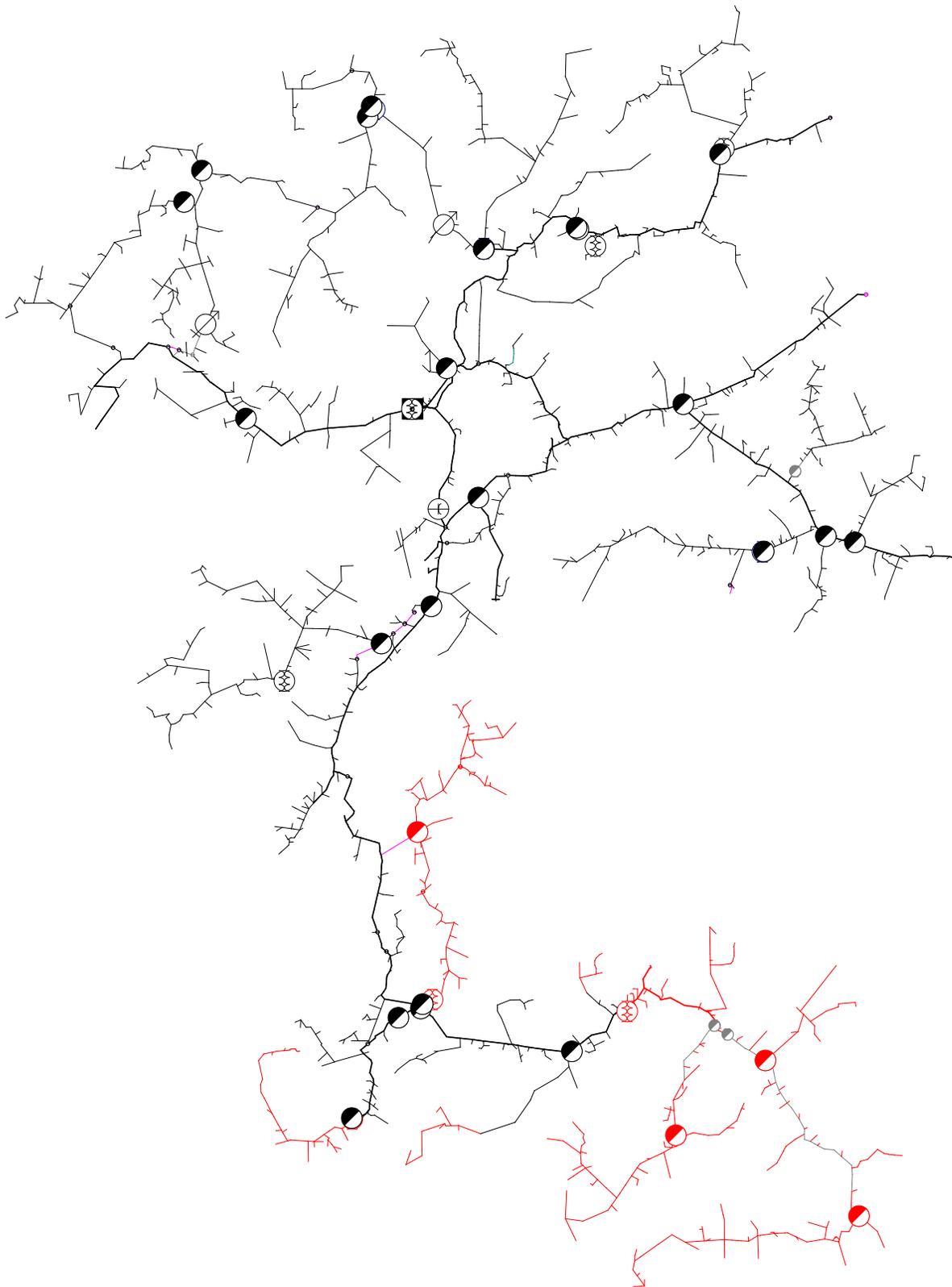
RECTORVILLE SUBSTATION



SHARKEY SUBSTATION



SNOW HILL SUBSTATION

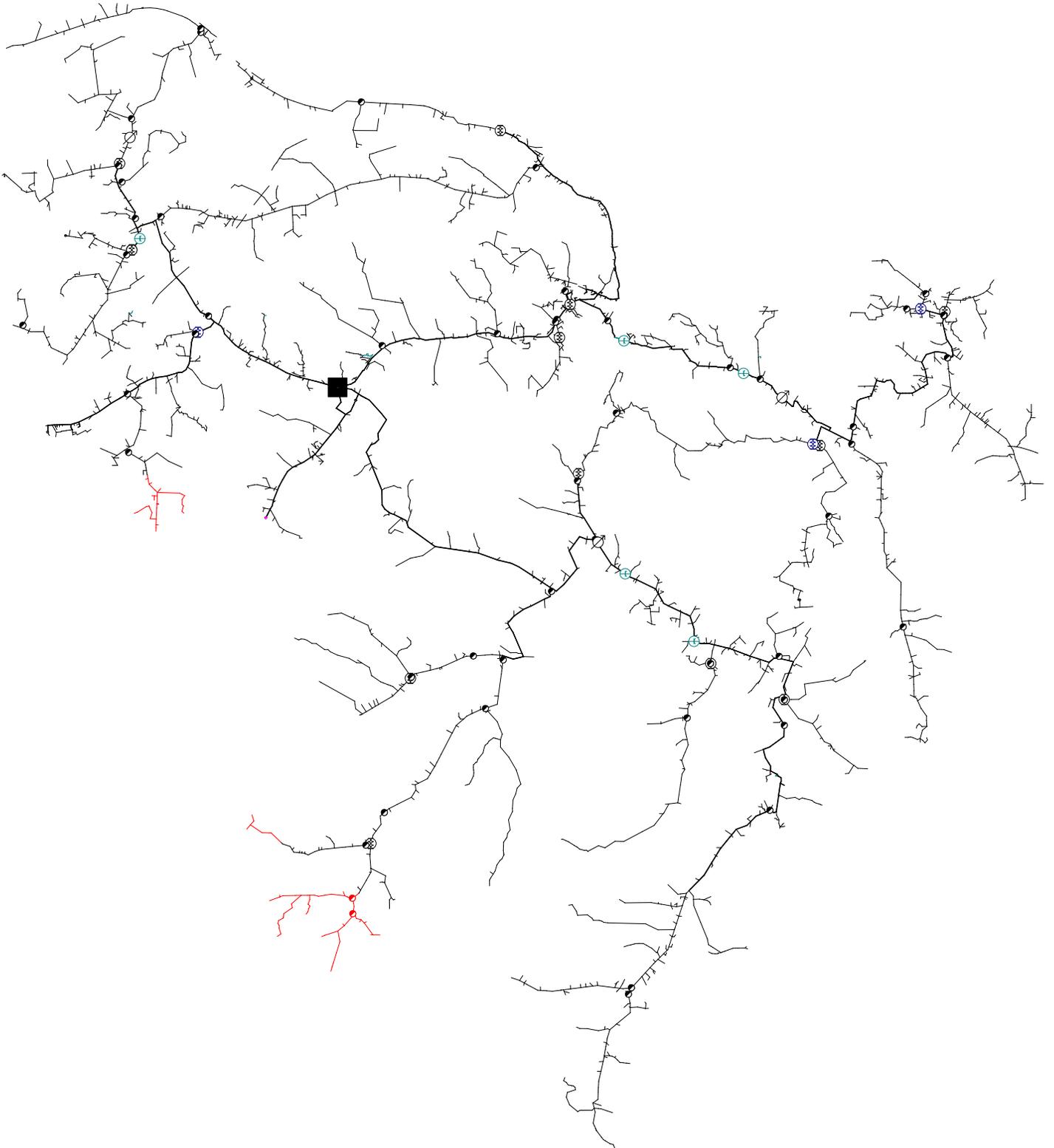


MAP SET 2

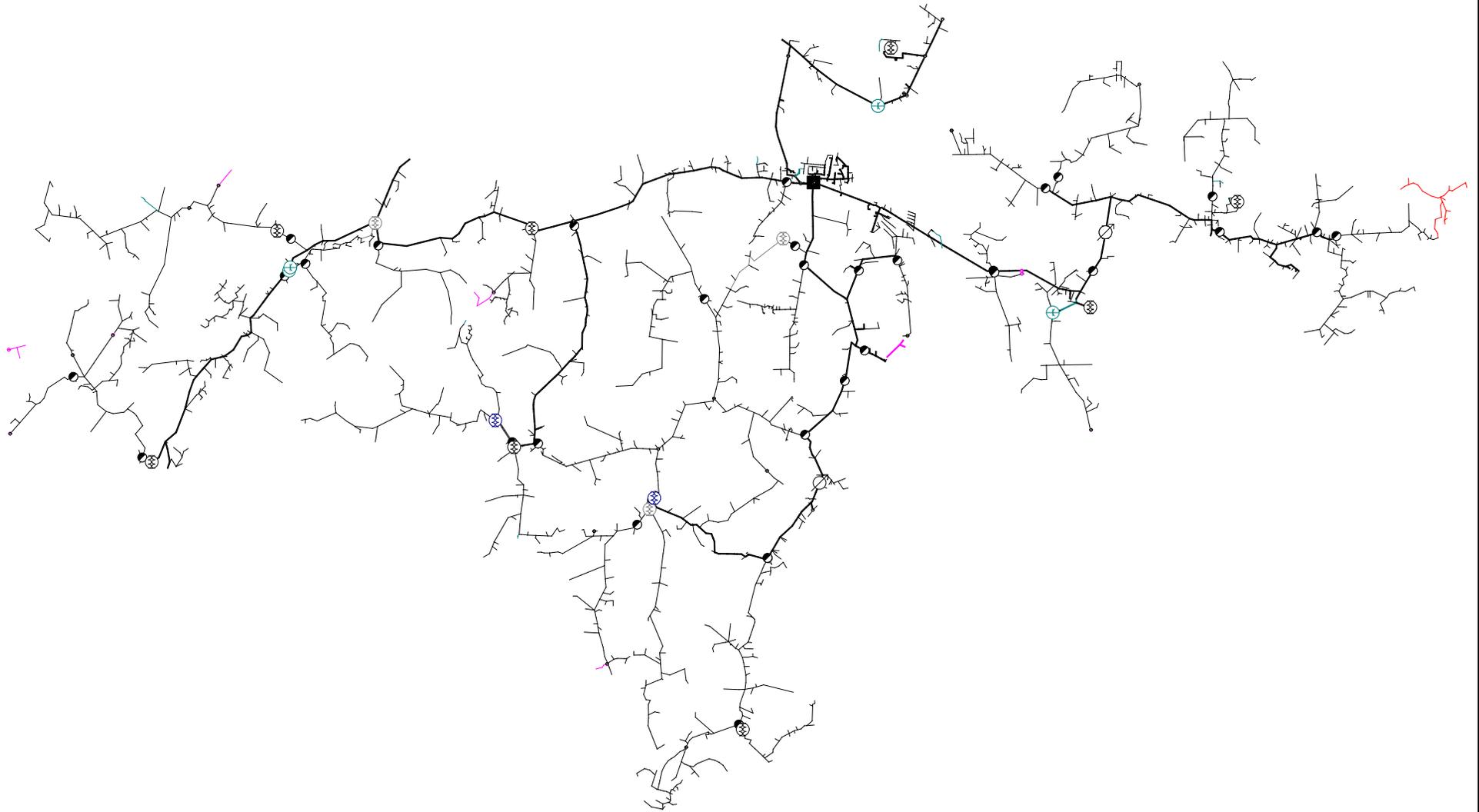
PROPOSED WINTER 2012 / 2013

(WITH RECOMMENDED SYSTEM IMPROVEMENTS)

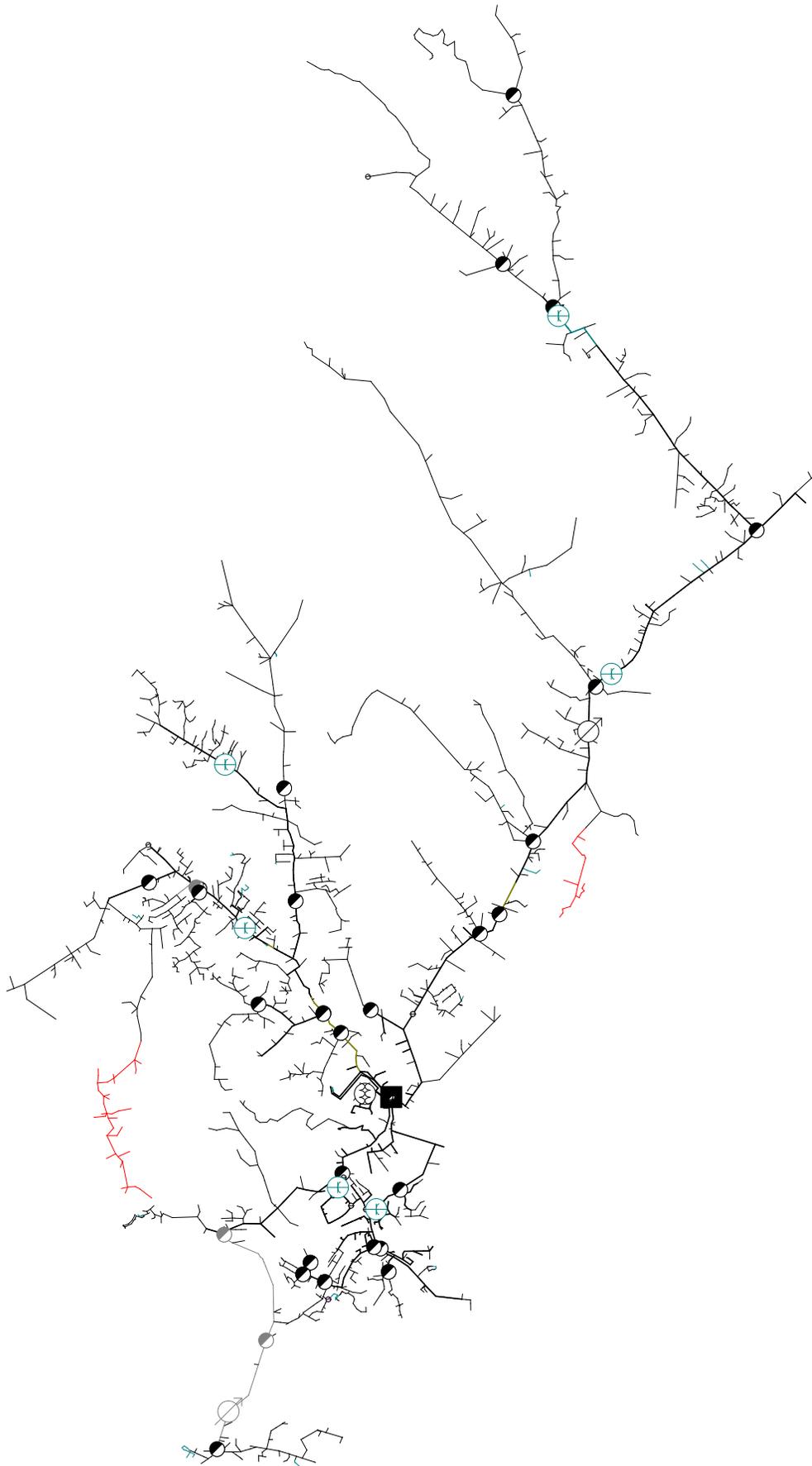
CHARTERS SUBSTATION



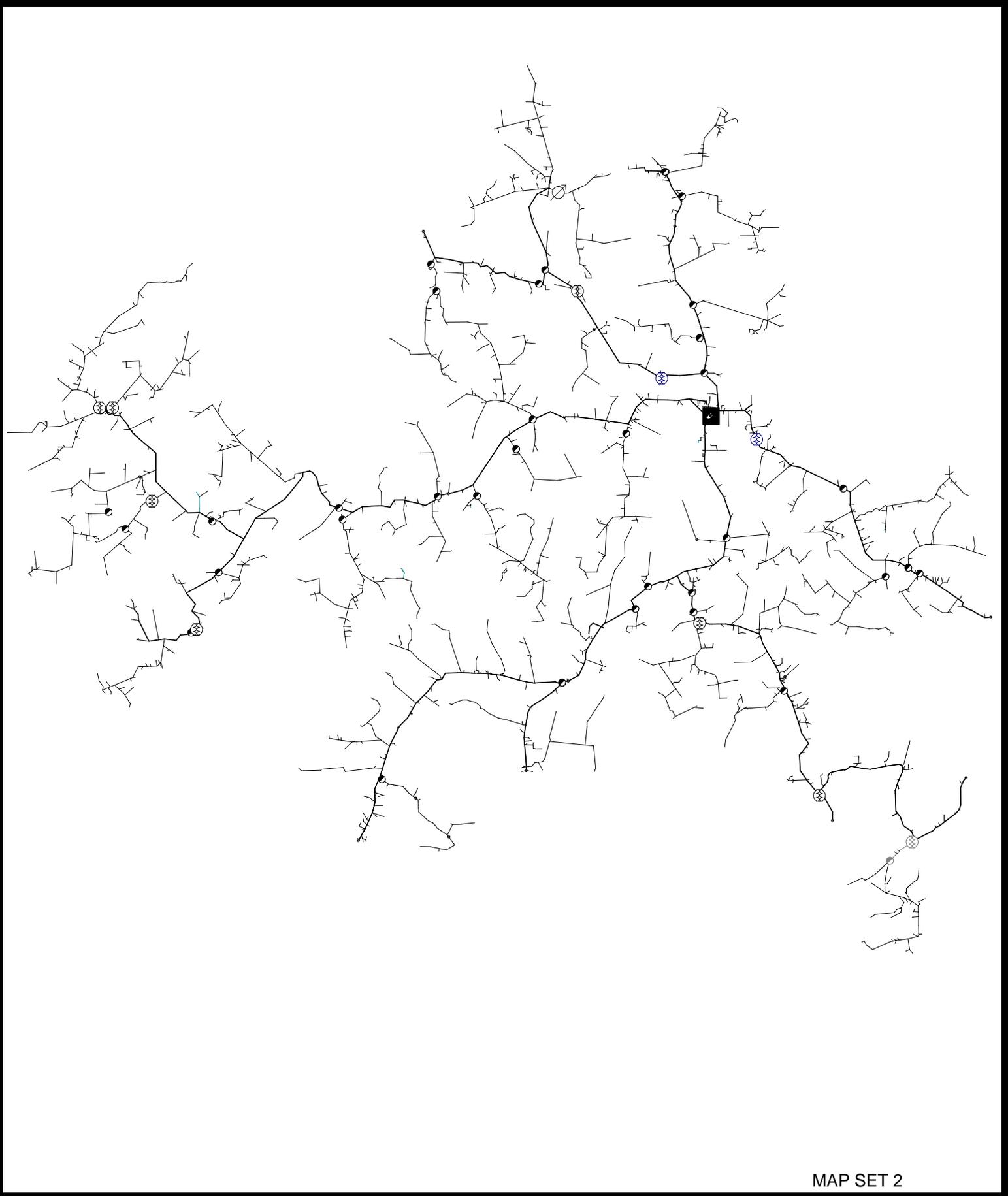
FLEMINGSBURG SUBSTATION



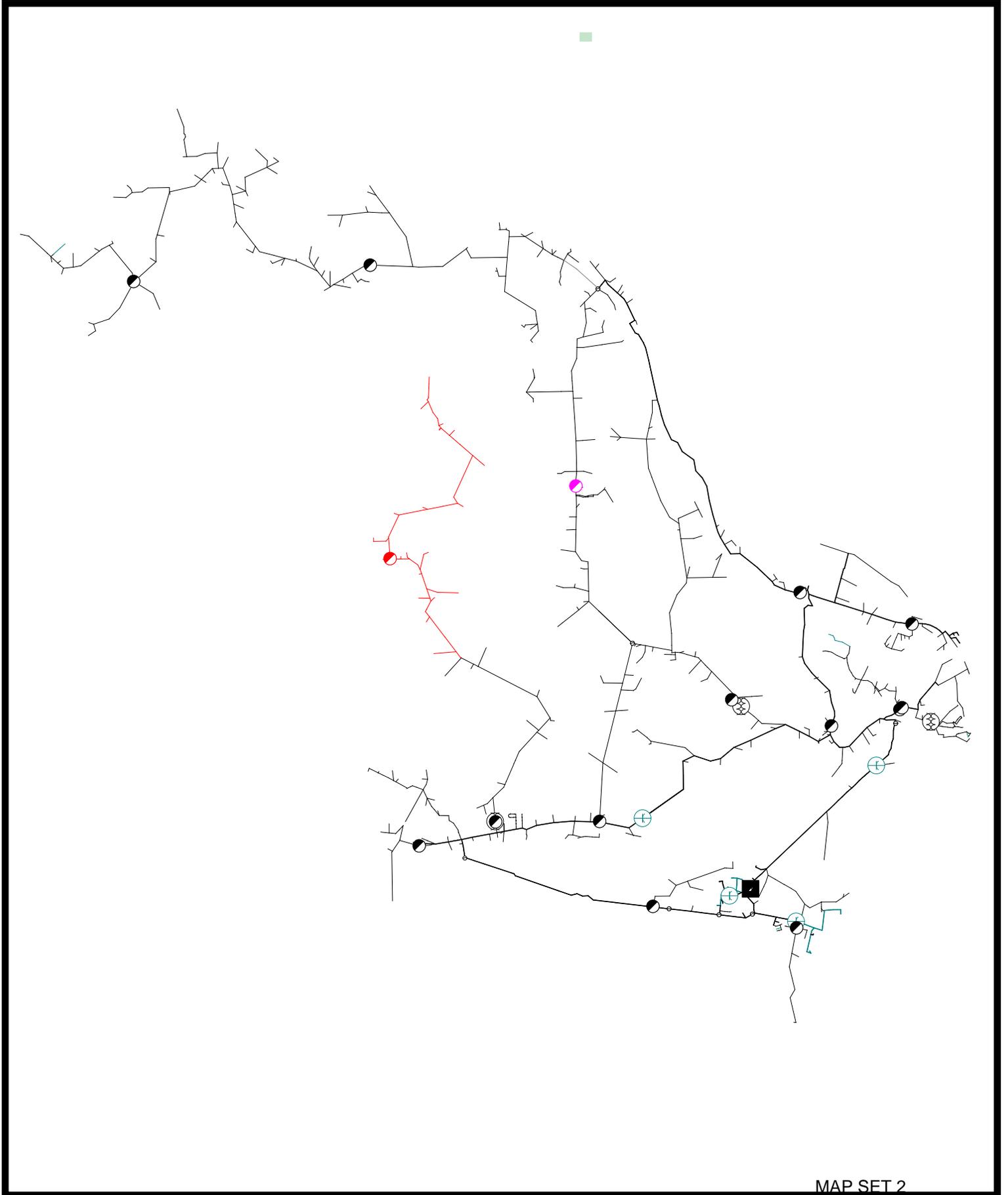
HILDA SUBSTATION



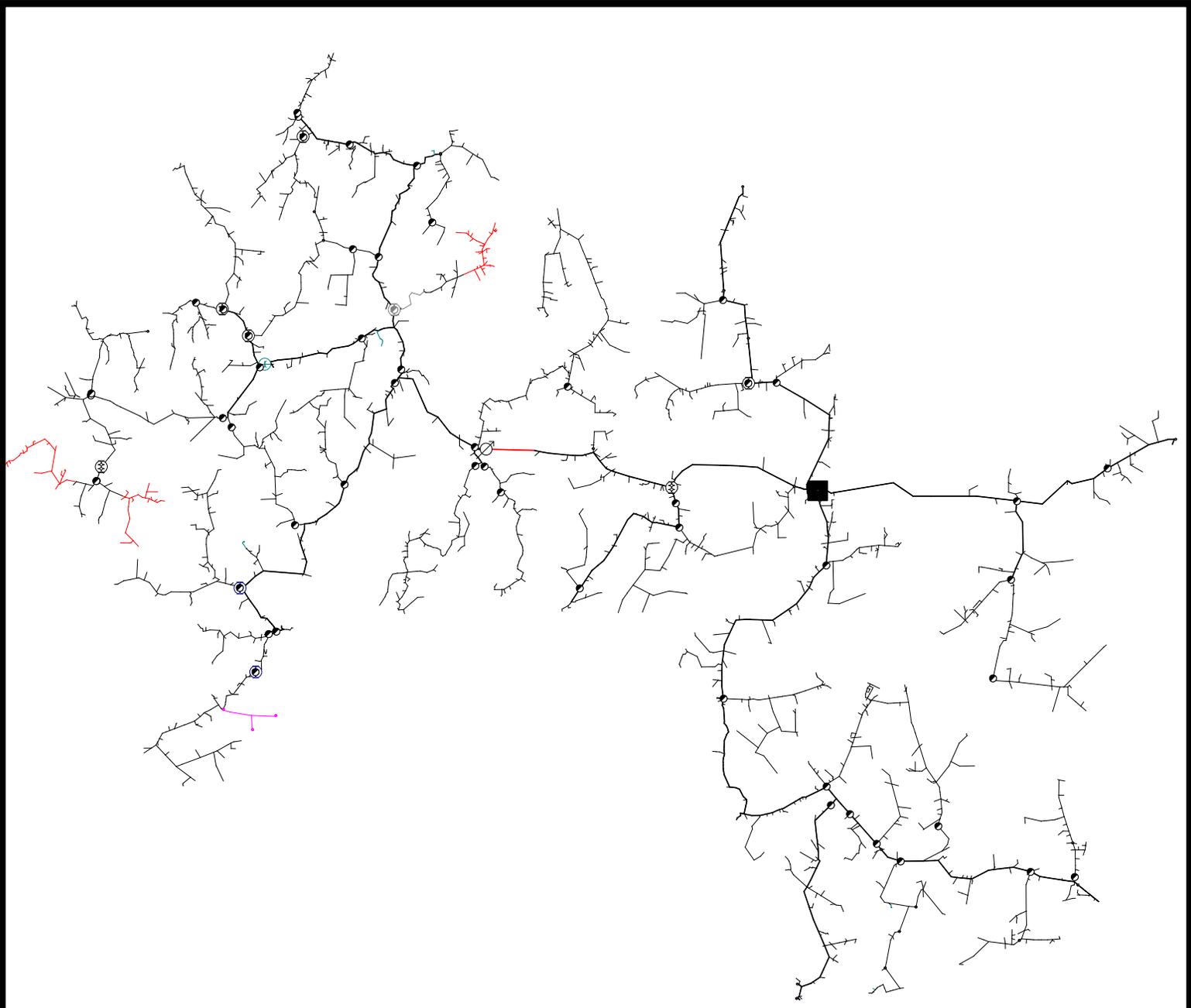
HILLSBORO SUBSTATION



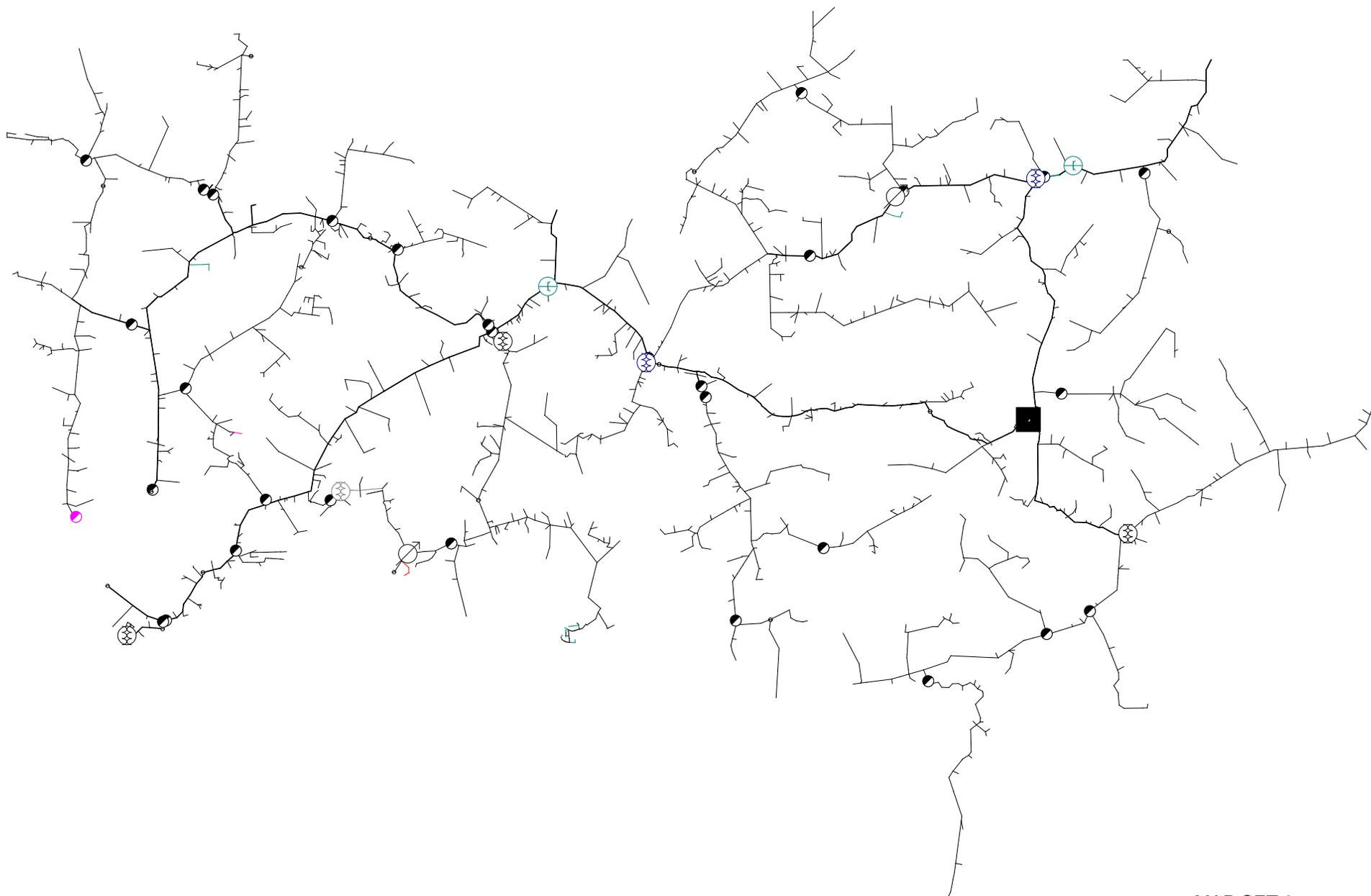
MAYSVILLE SUBSTATION



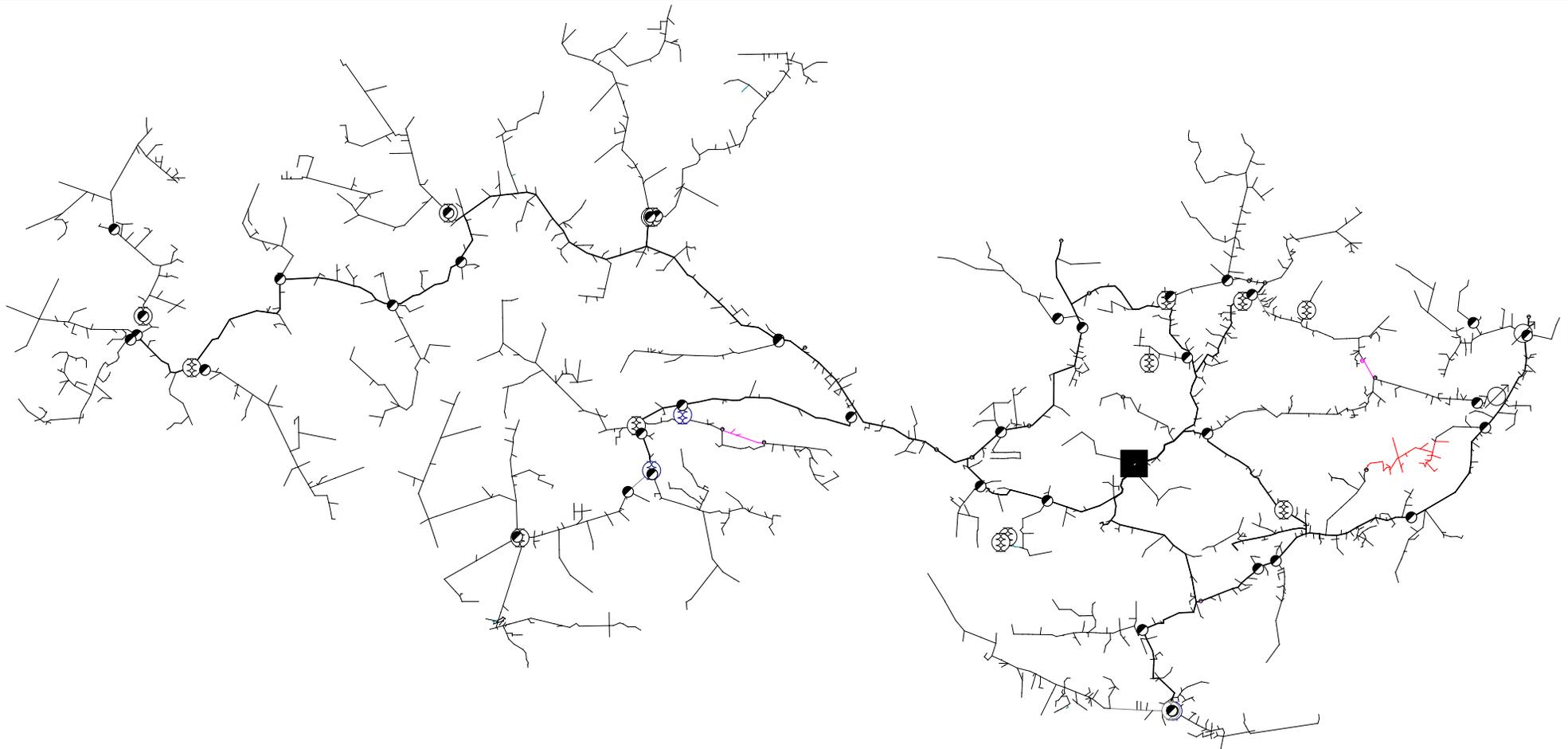
MURPHYSVILLE SUBSTATION



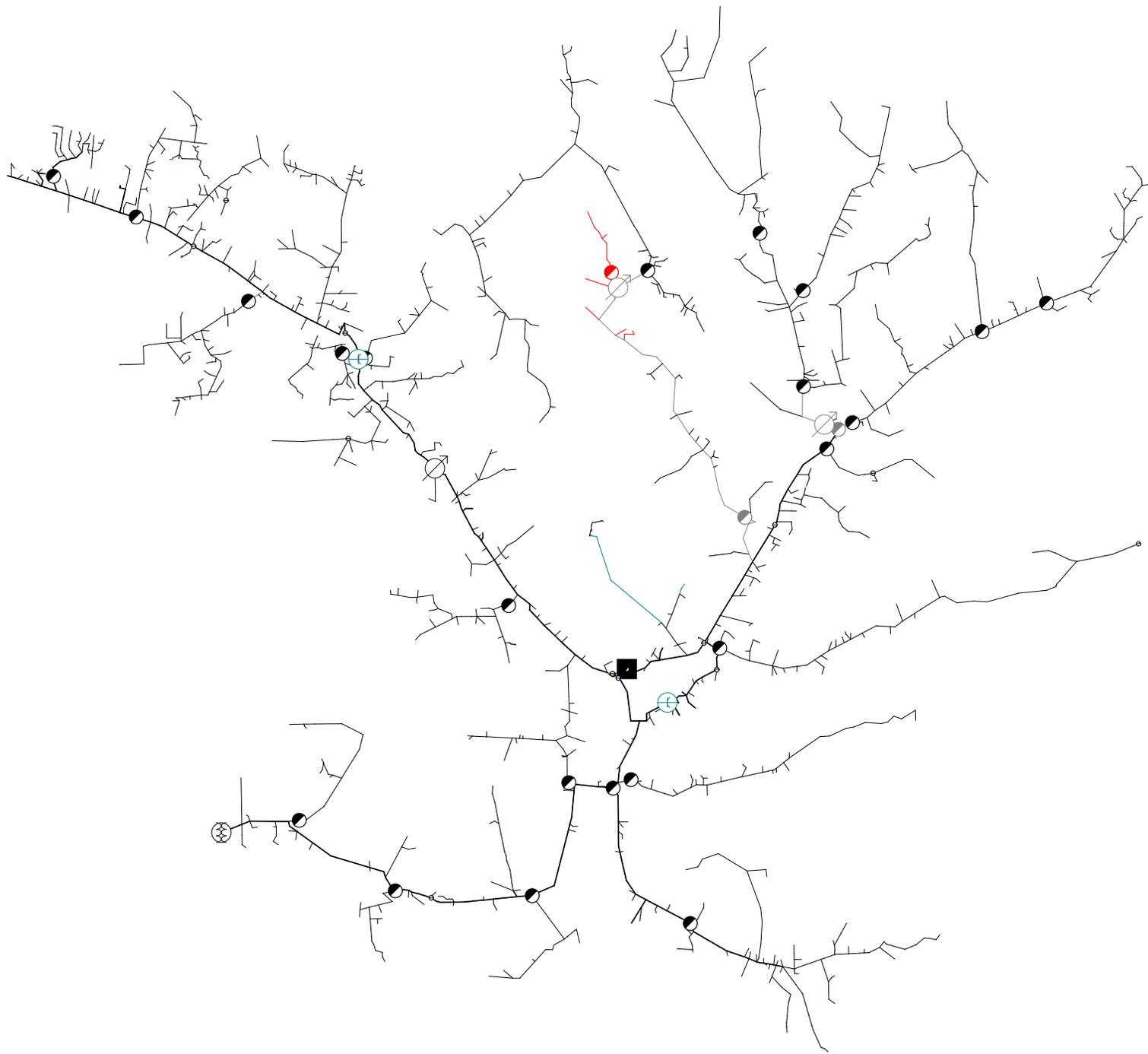
OAK RIDGE SUBSTATION



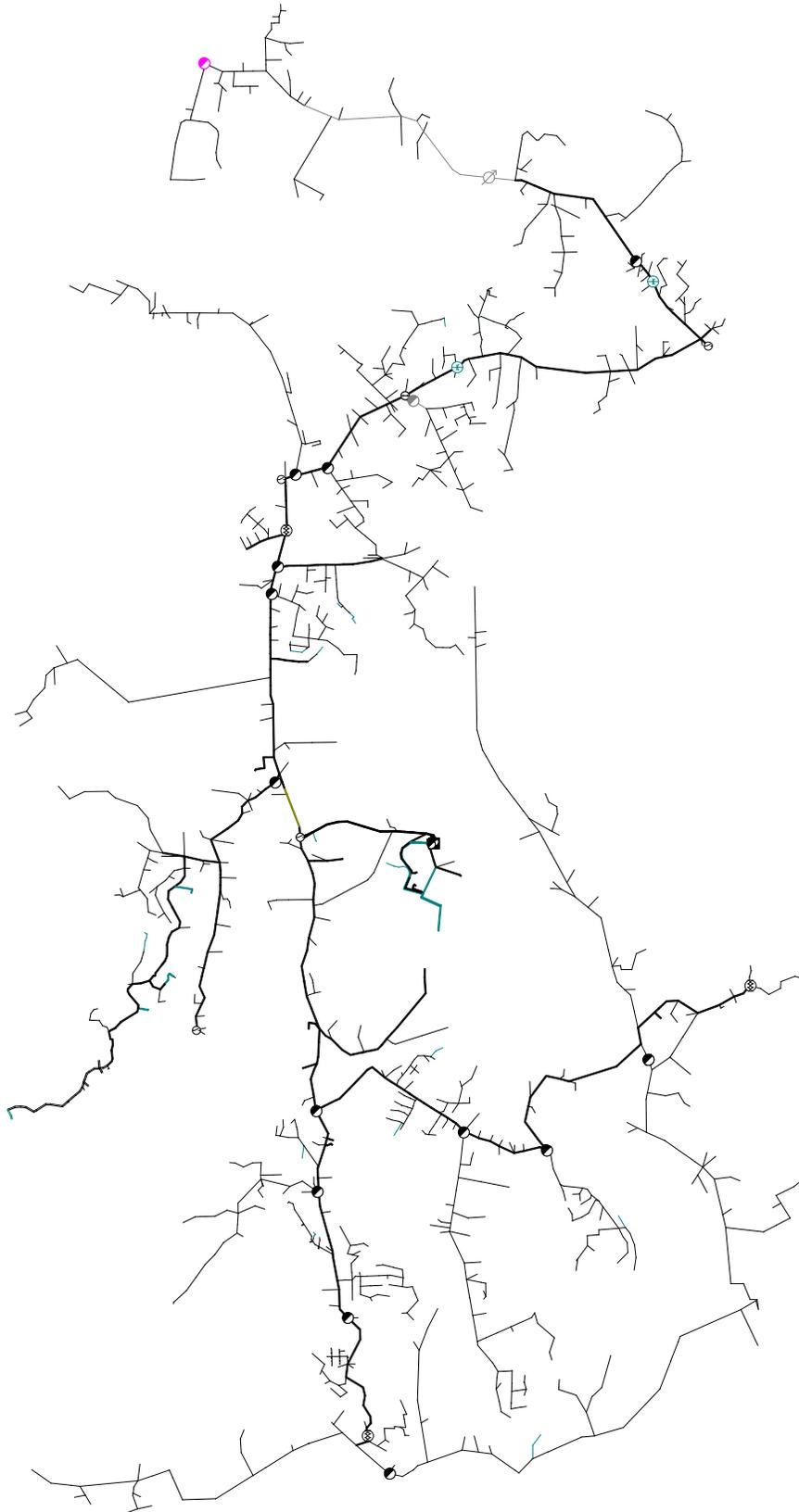
PEASTICKS SUBSTATION



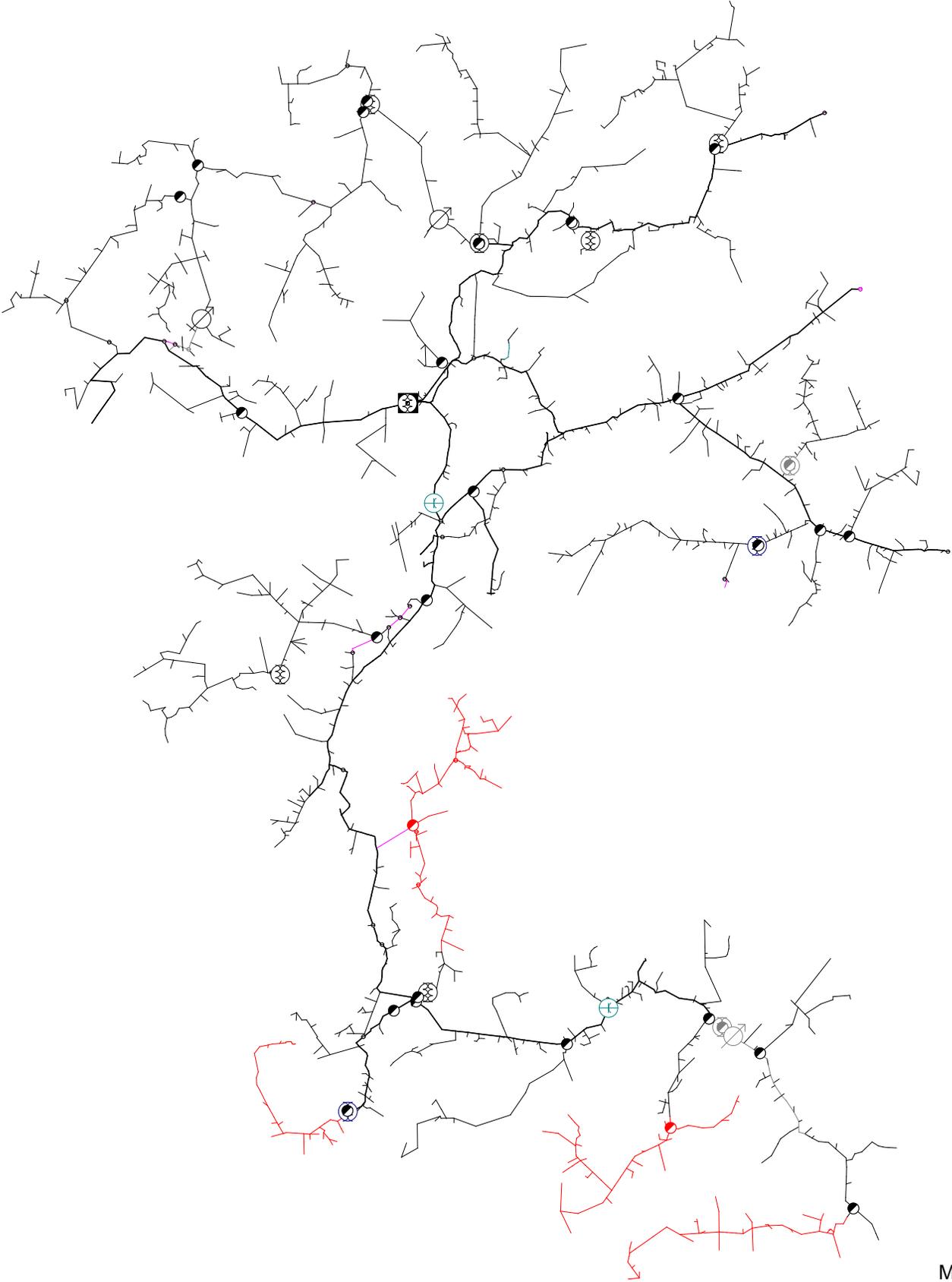
PLUMMERS LANDING SUBSTATION



SHARKEY SUBSTATION



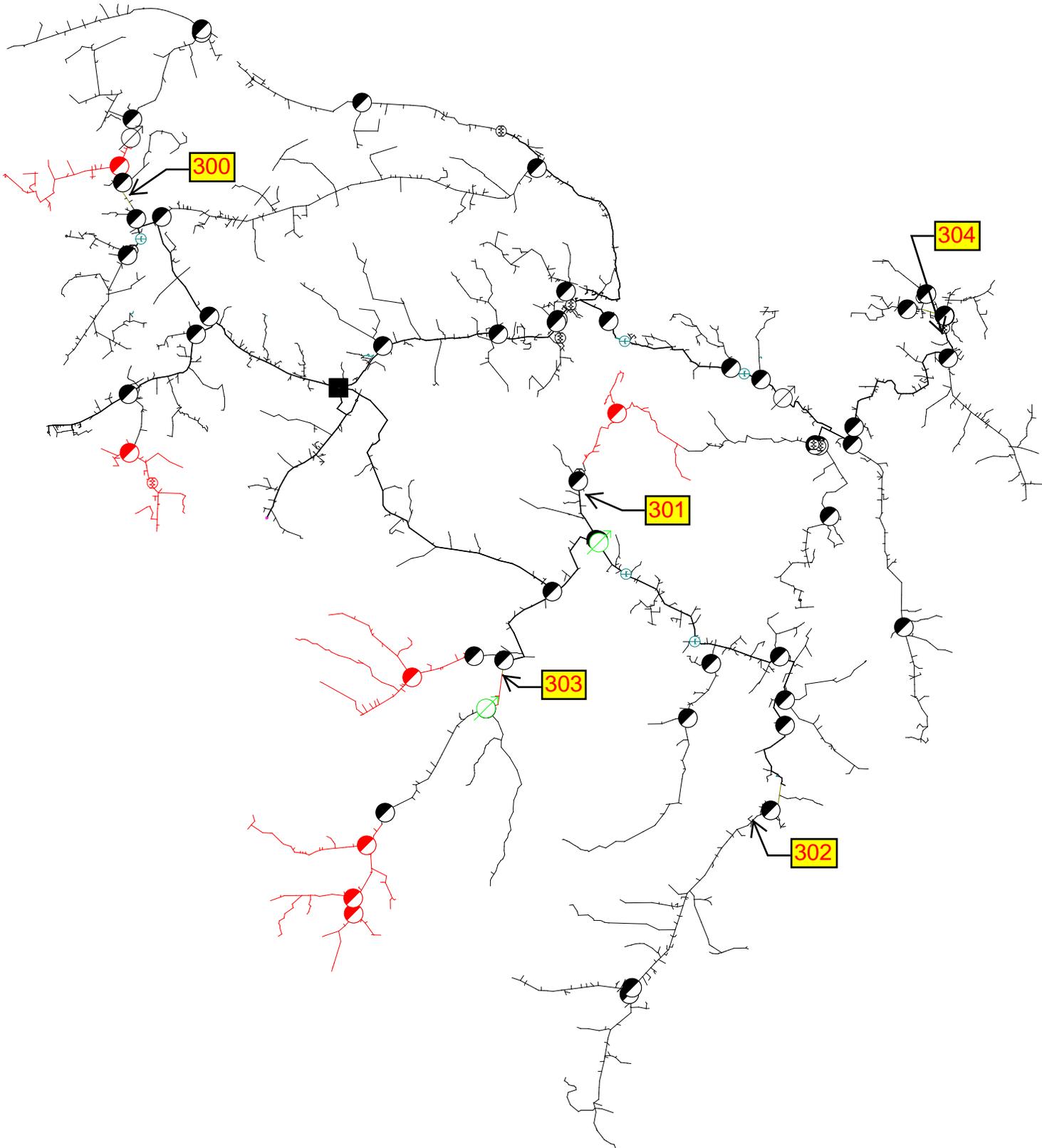
SNOW HILL SUBSTATION

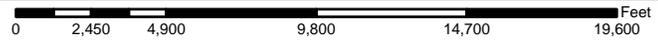
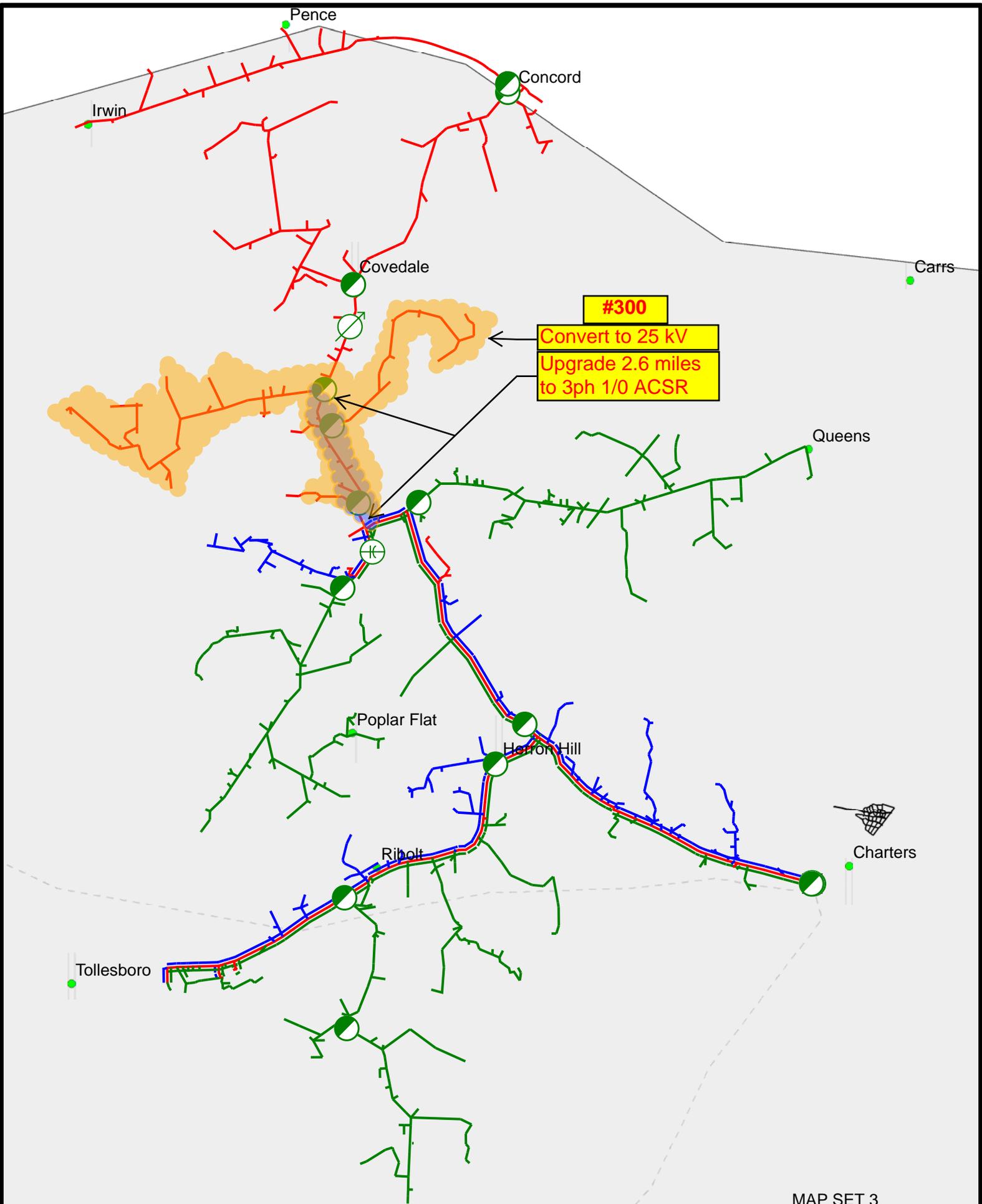


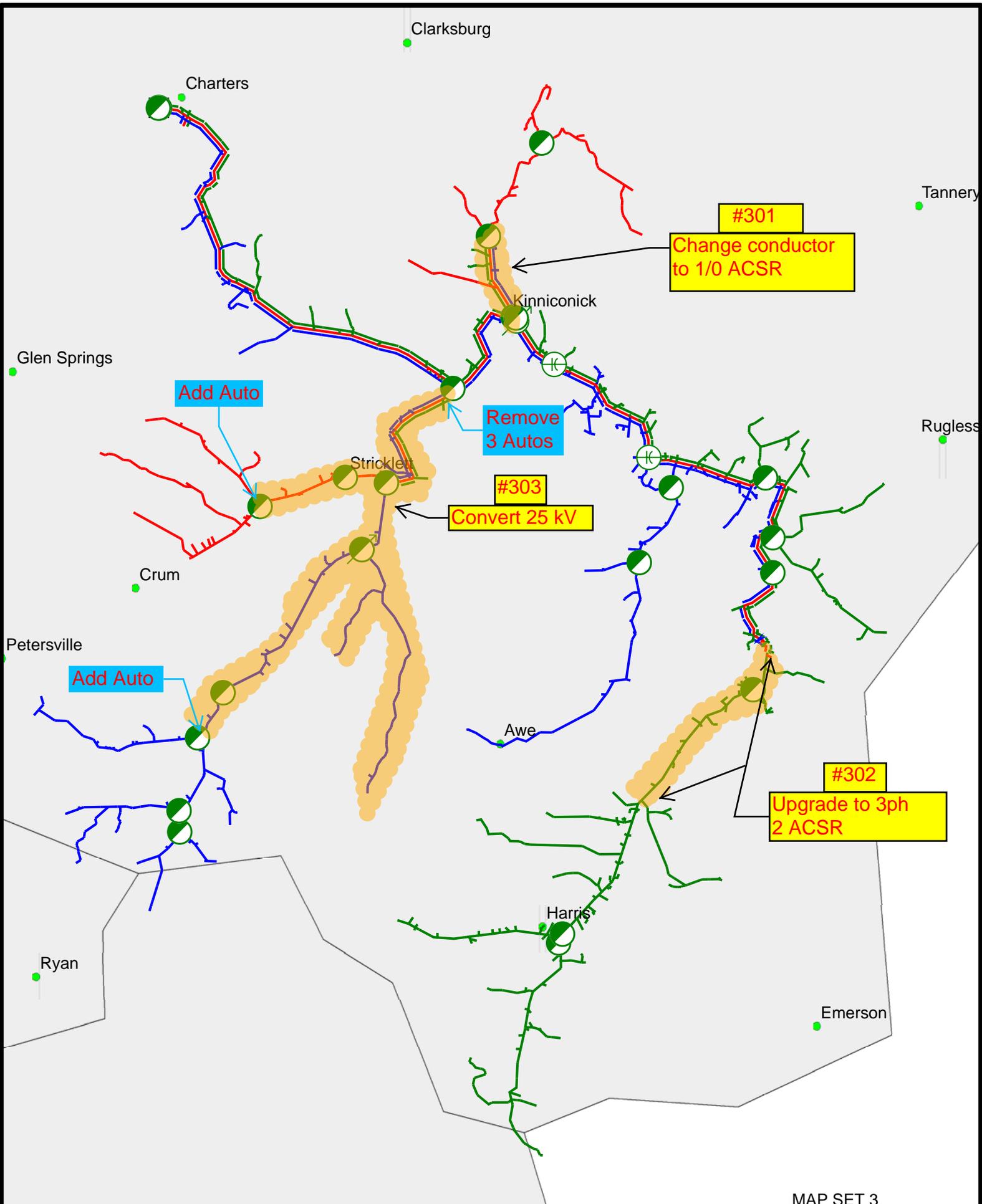
MAP SET 3

**DETAILED SUBSTATION CIRCUIT CODE
300 SYSTEM IMPROVEMENTS
DESCRIPTIONS**

Fleming Mason Energy Charters Substation







Clarksburg

Charters

Tannery

#301

Change conductor to 1/0 ACSR

Kinniconick

Glen Springs

Add Auto

Remove 3 Autos

Rugless

Stricklet

#303

Convert 25 kV

Crum

Petersville

Add Auto

Awe

#302

Upgrade to 3ph 2 ACSR

Harris

Ryan

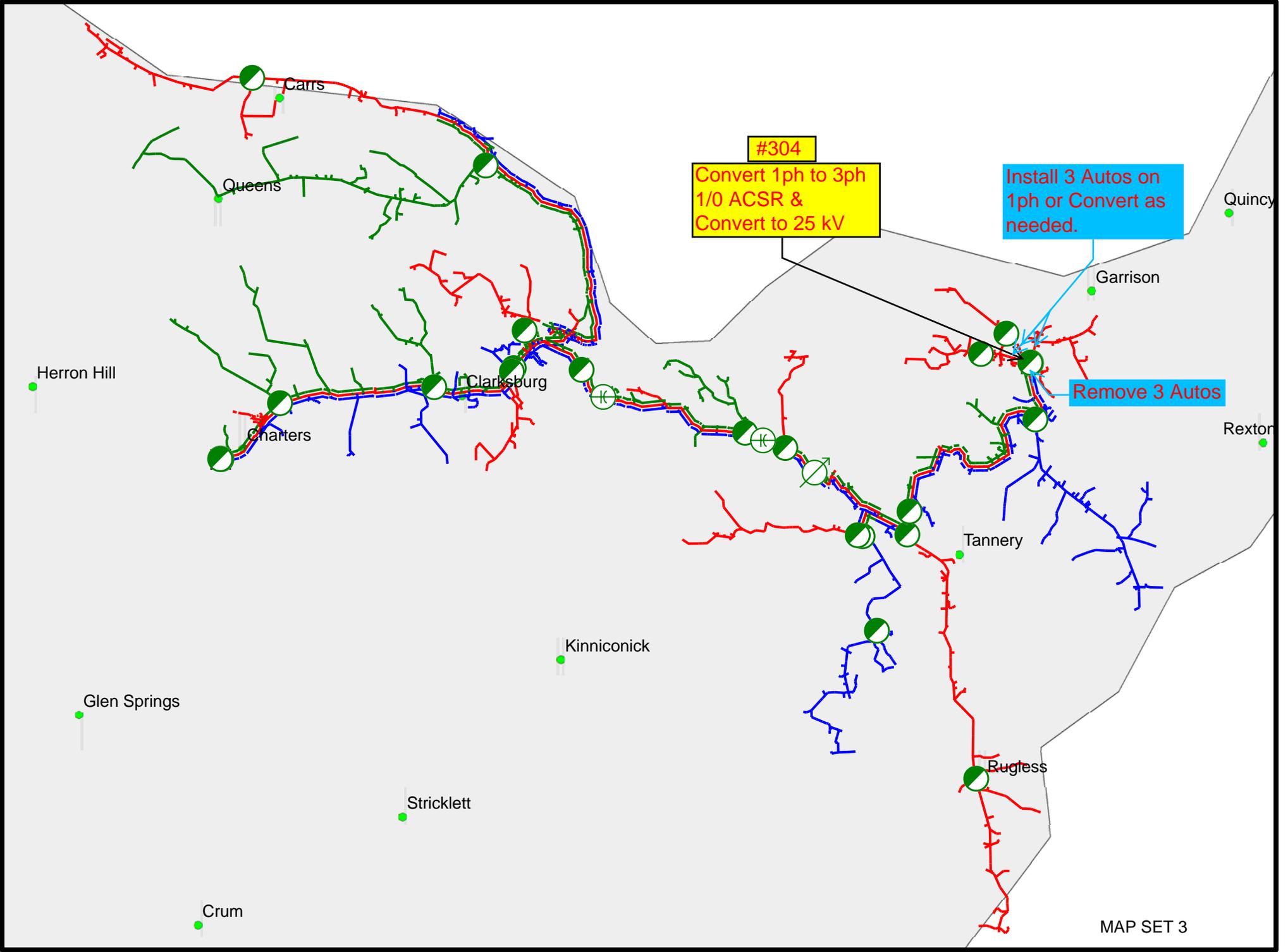
Emerson

MAP SET 3

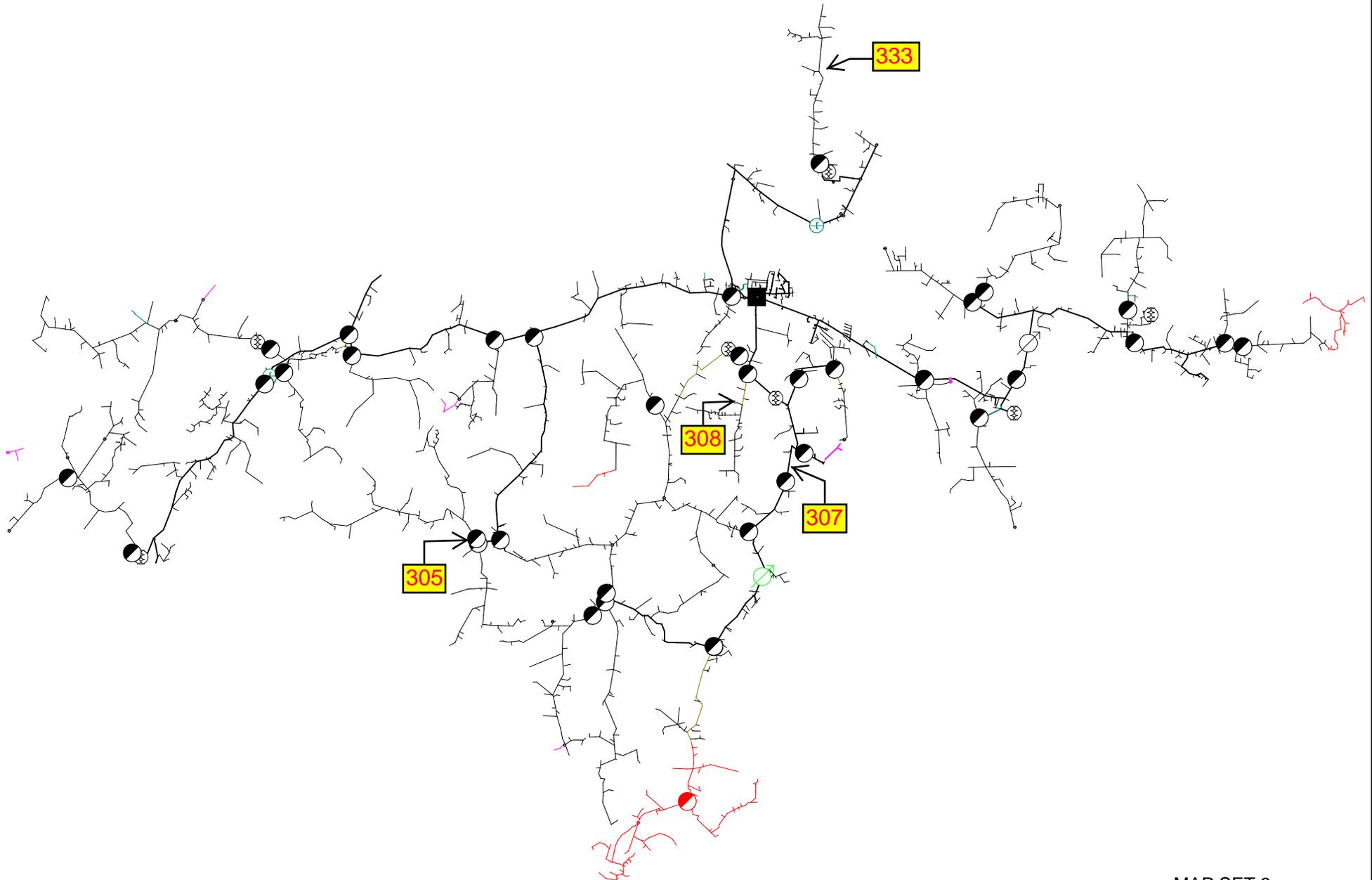


Fleming-Mason Energy

Vanceburg

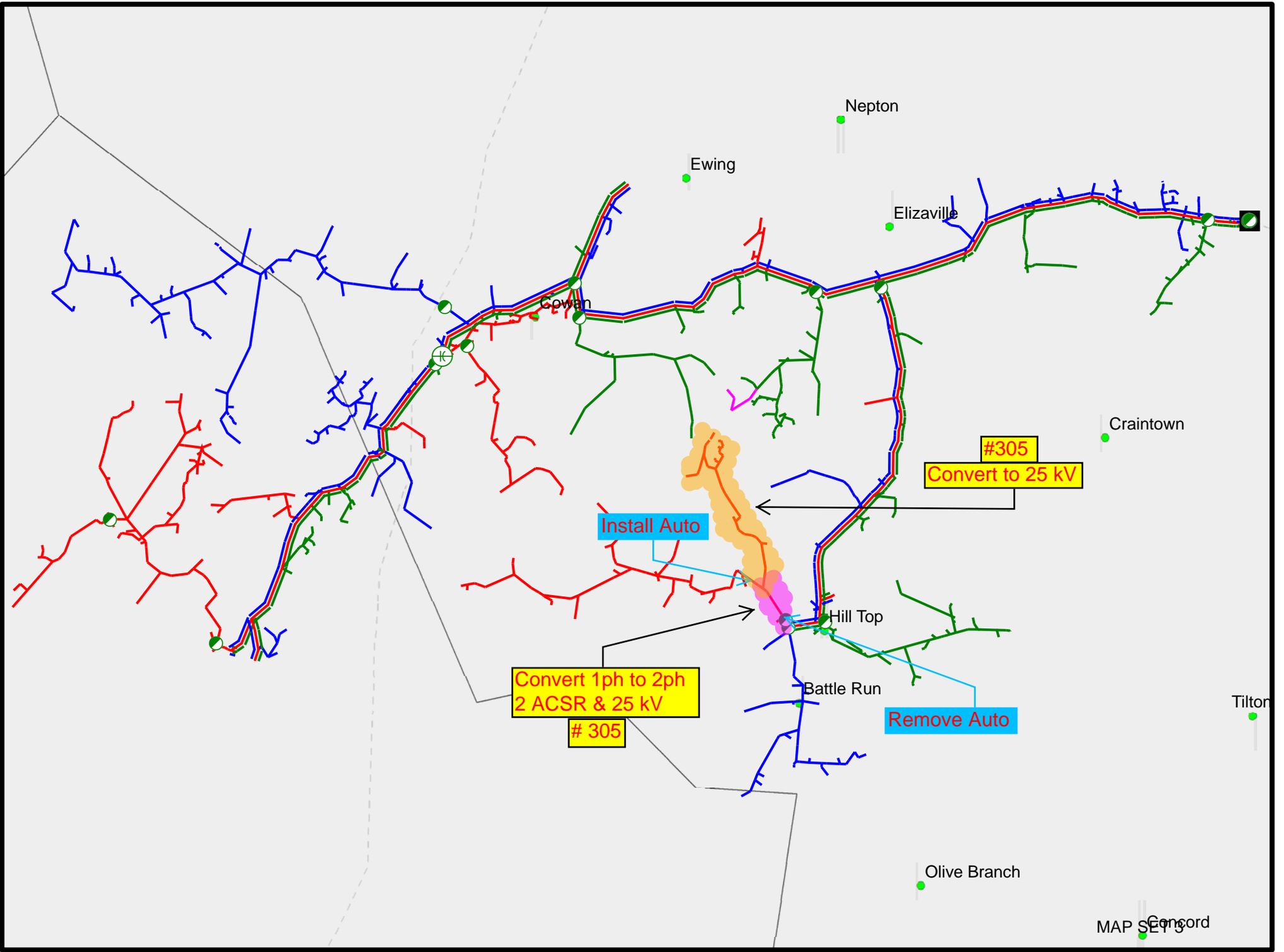


Fleming Mason Energy Flemingsburg Substation



Fleming-Mason Energy

Cowan

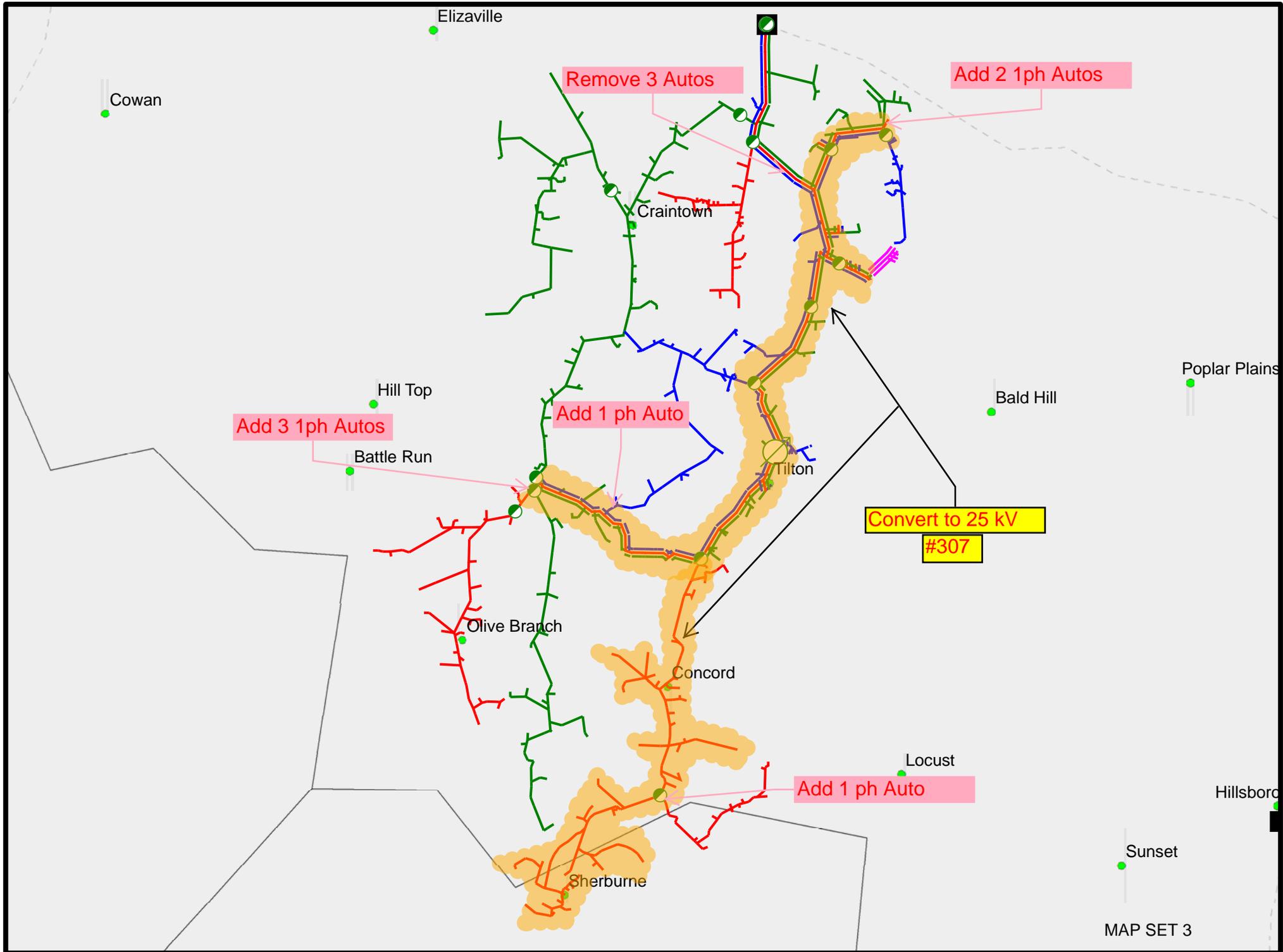


0 2,200 4,400 8,800 13,200 17,600 Feet

MAP SET 3

Fleming-Mason Energy

Tilton



0 2,450 4,900 9,800 14,700 19,600 Feet

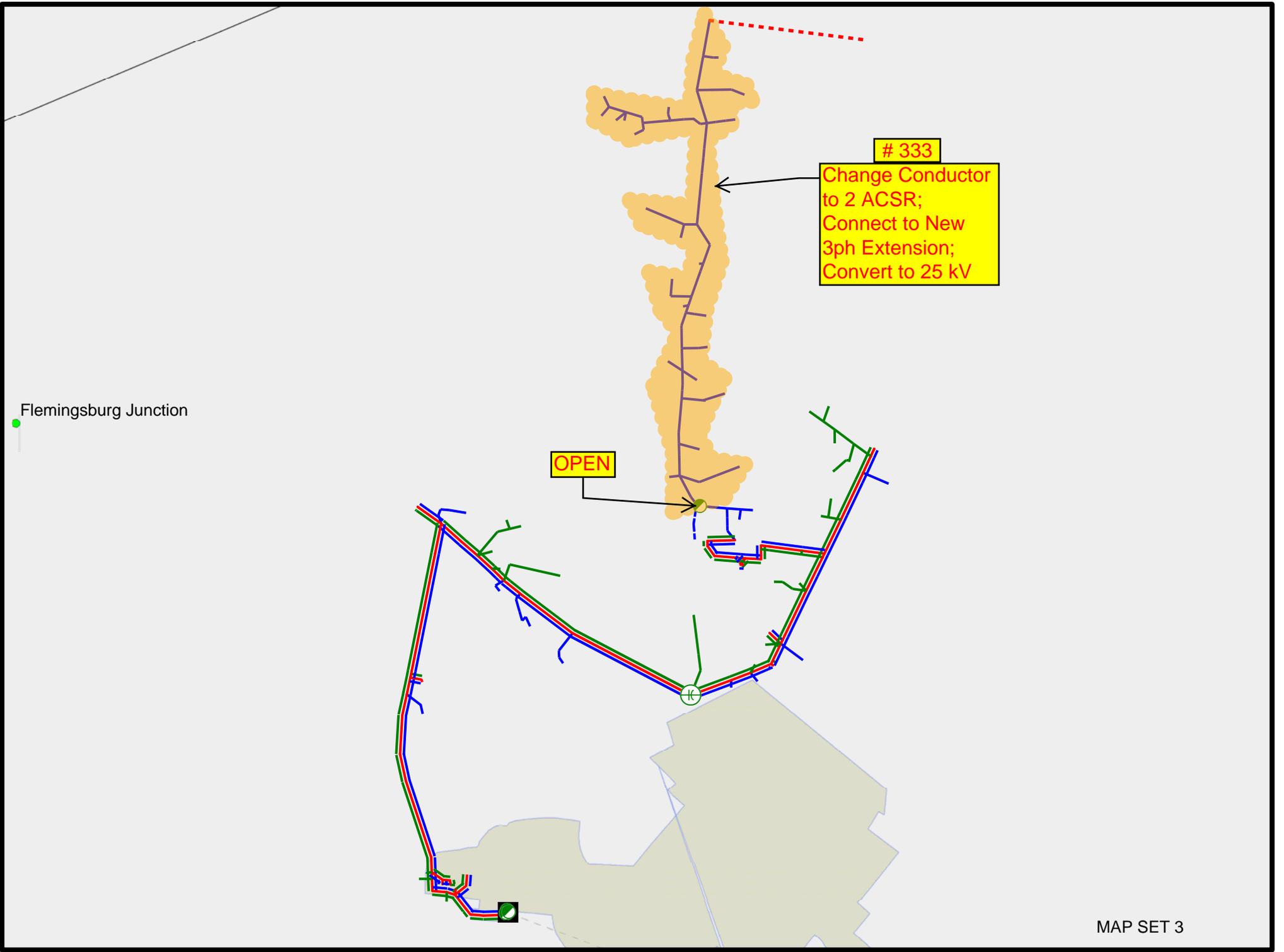
MAP SET 3

Flemingsburg Junction

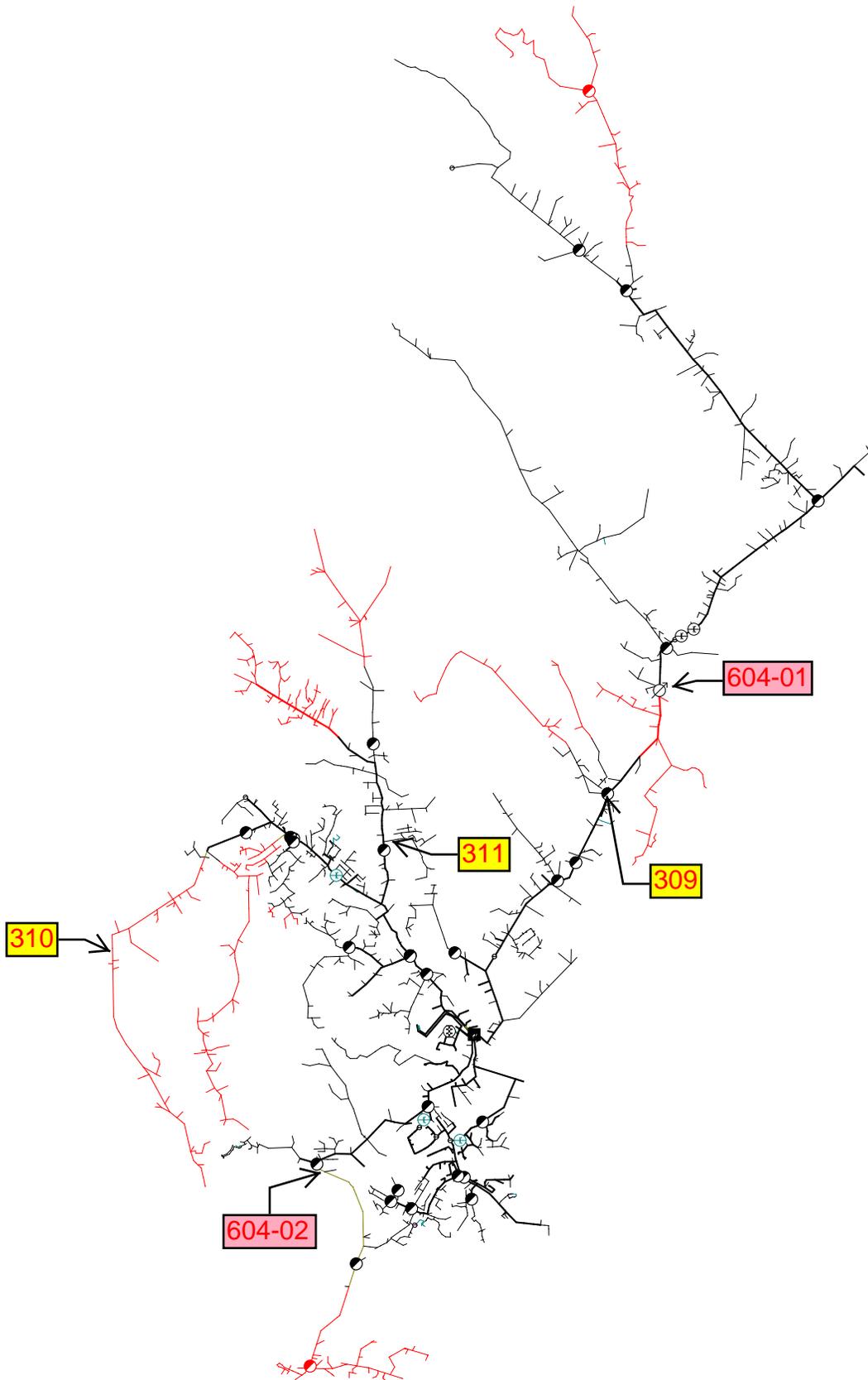
333

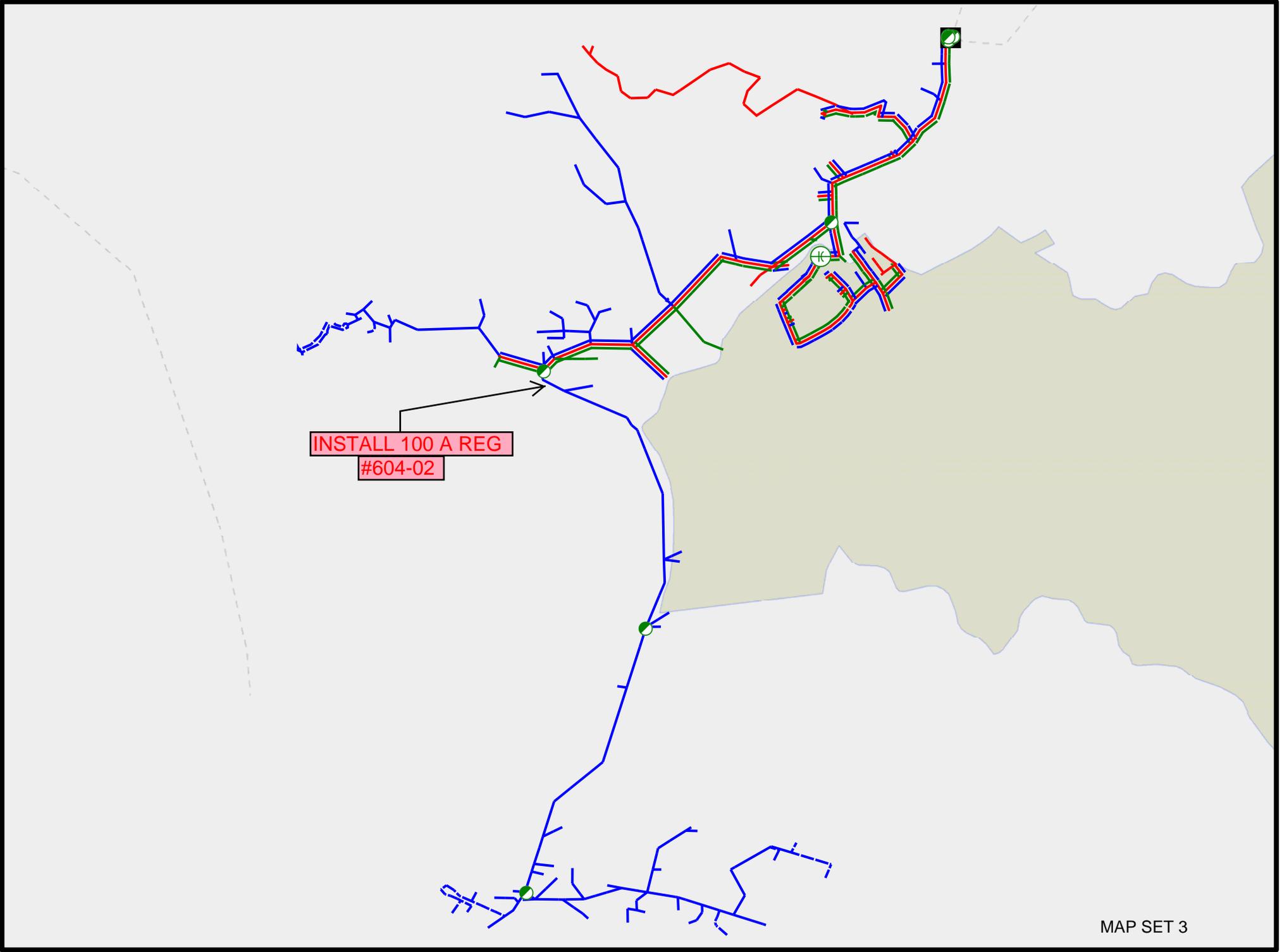
Change Conductor to 2 ACSR;
Connect to New 3ph Extension;
Convert to 25 kV

OPEN



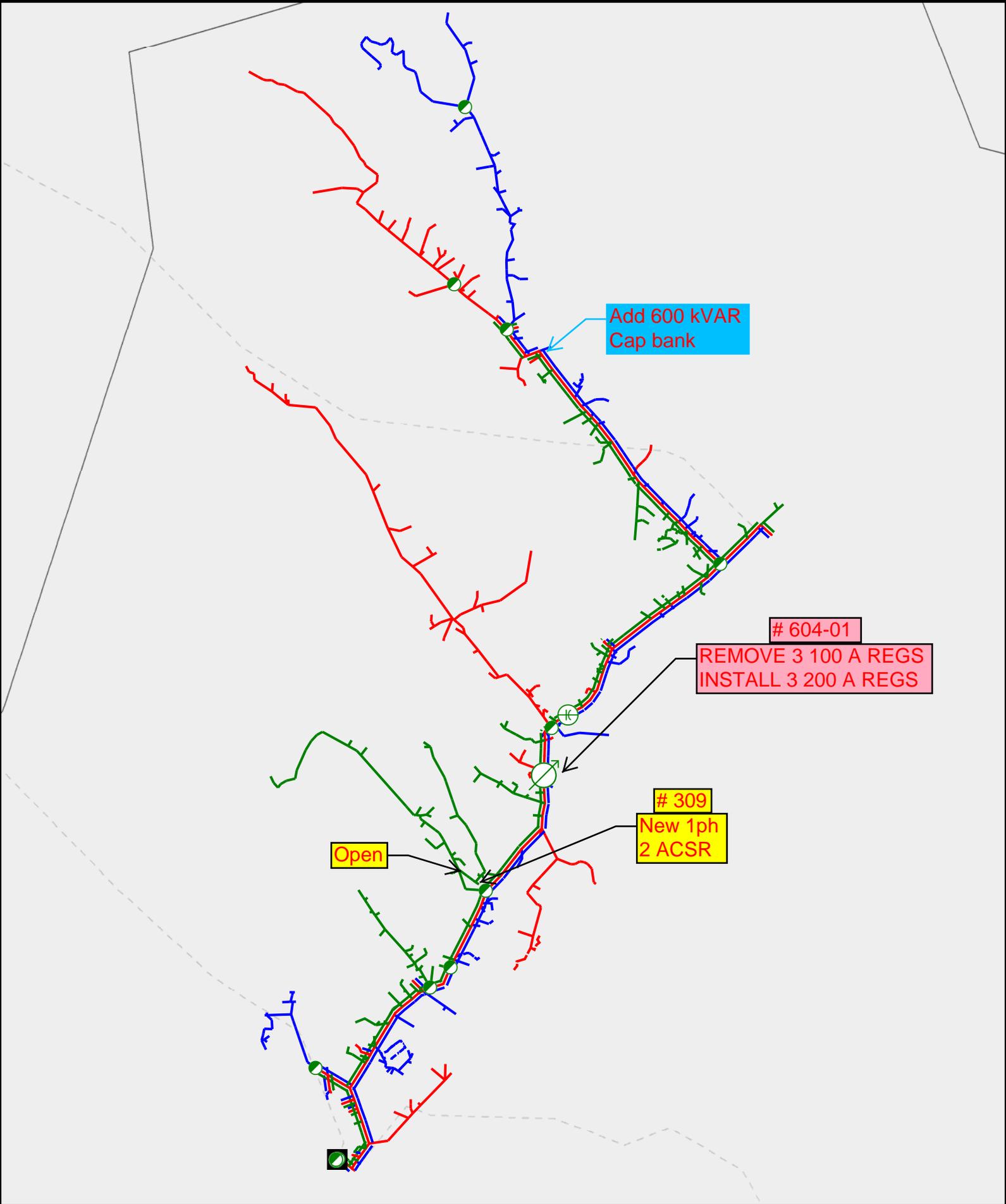
Fleming Mason Energy Hilda Substation

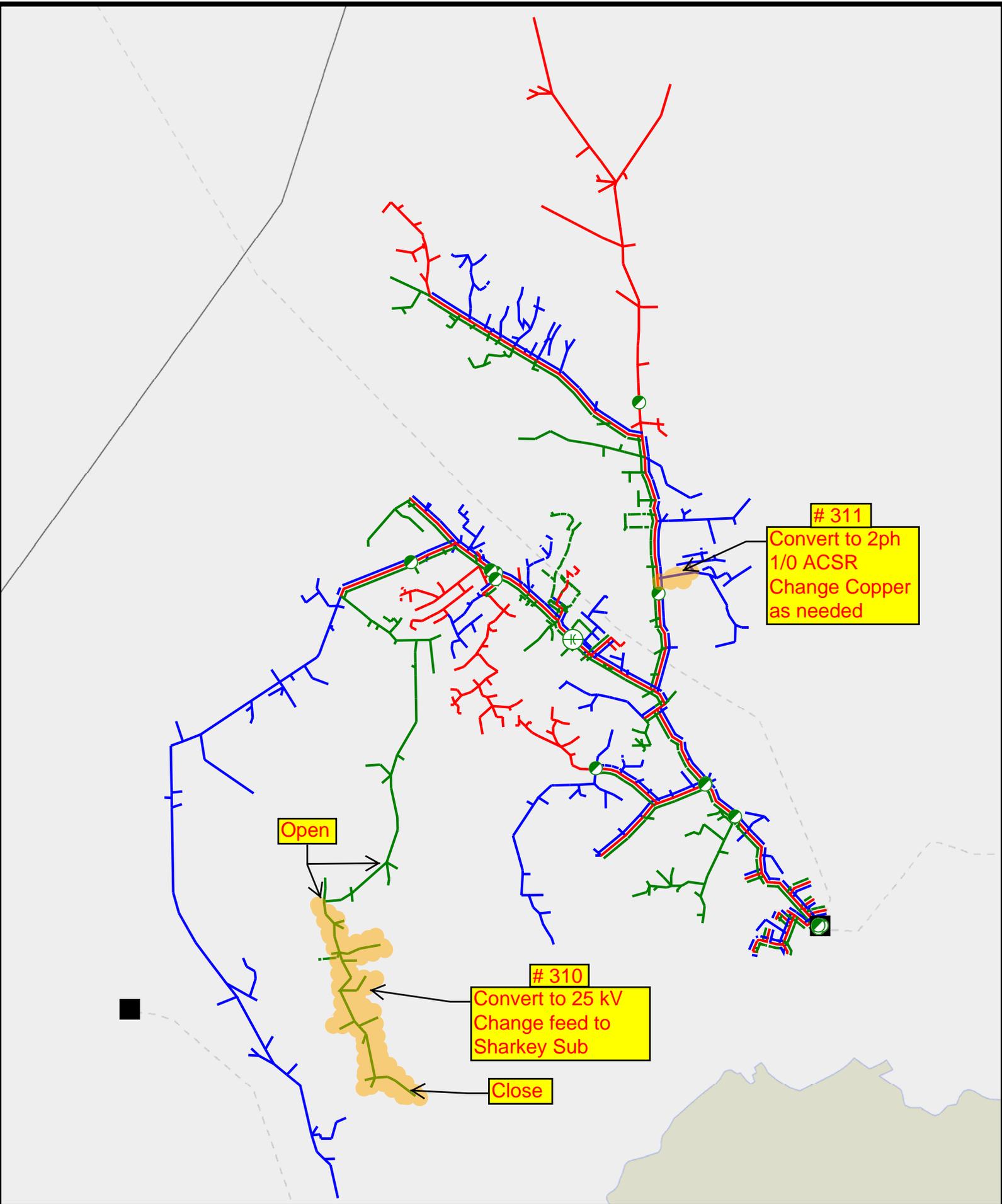




INSTALL 100 A REG
#604-02

0 900 1,800 3,600 5,400 7,200 Feet





311
Convert to 2ph
1/0 ACSR
Change Copper
as needed

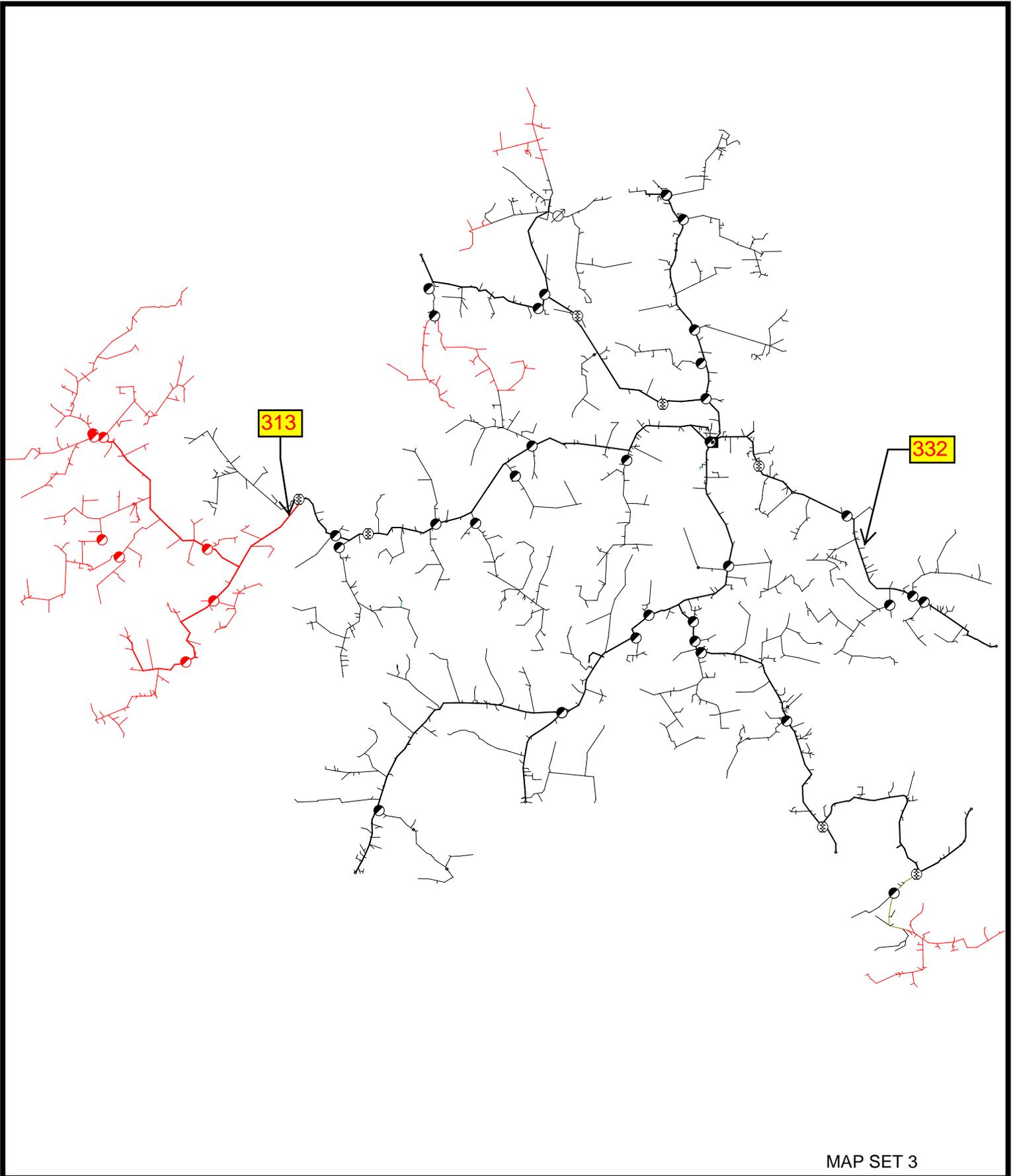
Open

310
Convert to 25 kV
Change feed to
Sharkey Sub

Close



Fleming Mason Energy Hillsboro Substation



Battle Run

Tilton

Add 2 1ph Autos

Olive Branch

Concord

Remove Step-up Auto

#313
Convert to 25 kV

Locust

Hillsboro

Sherburne

Sunset

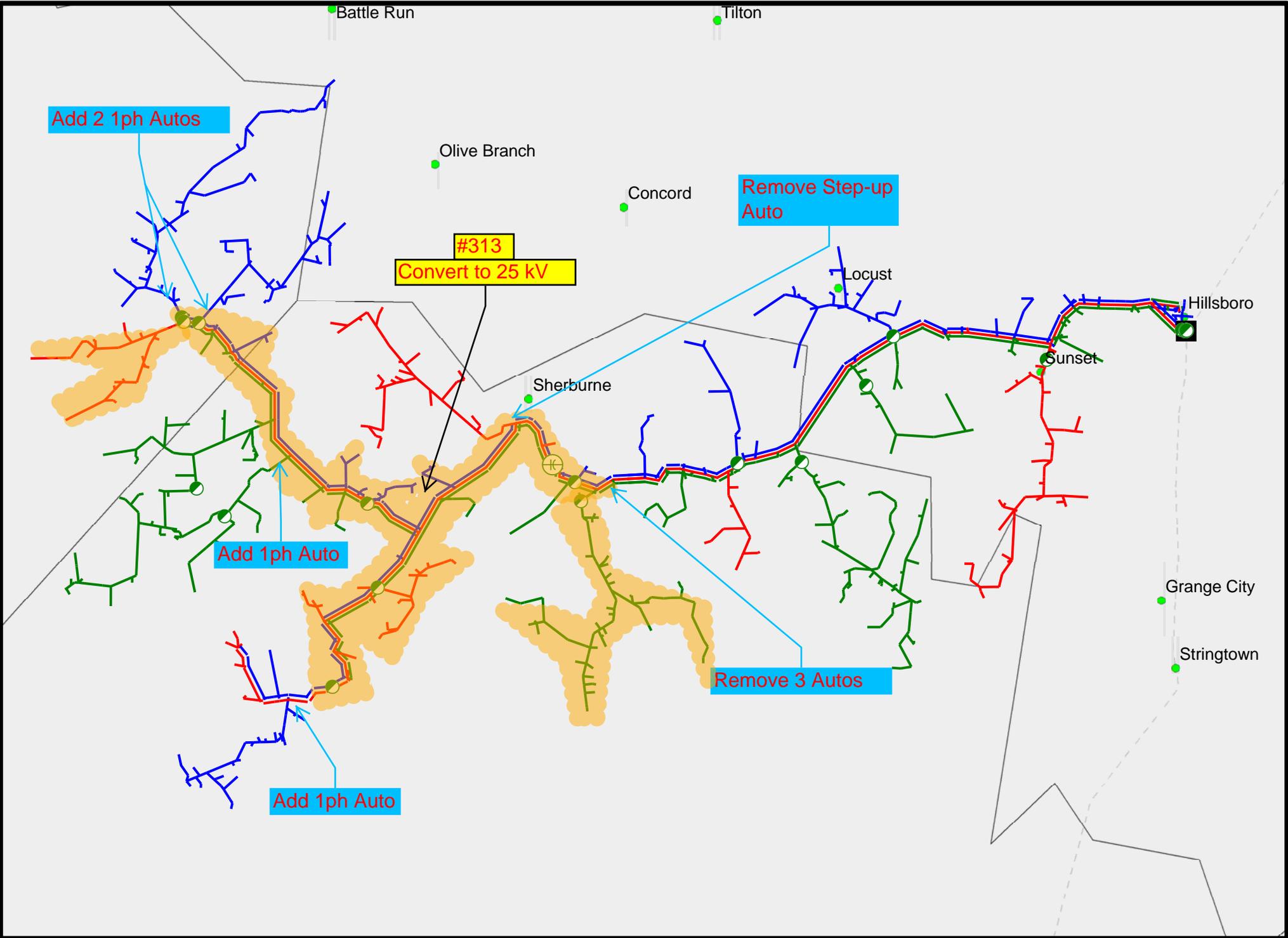
Add 1ph Auto

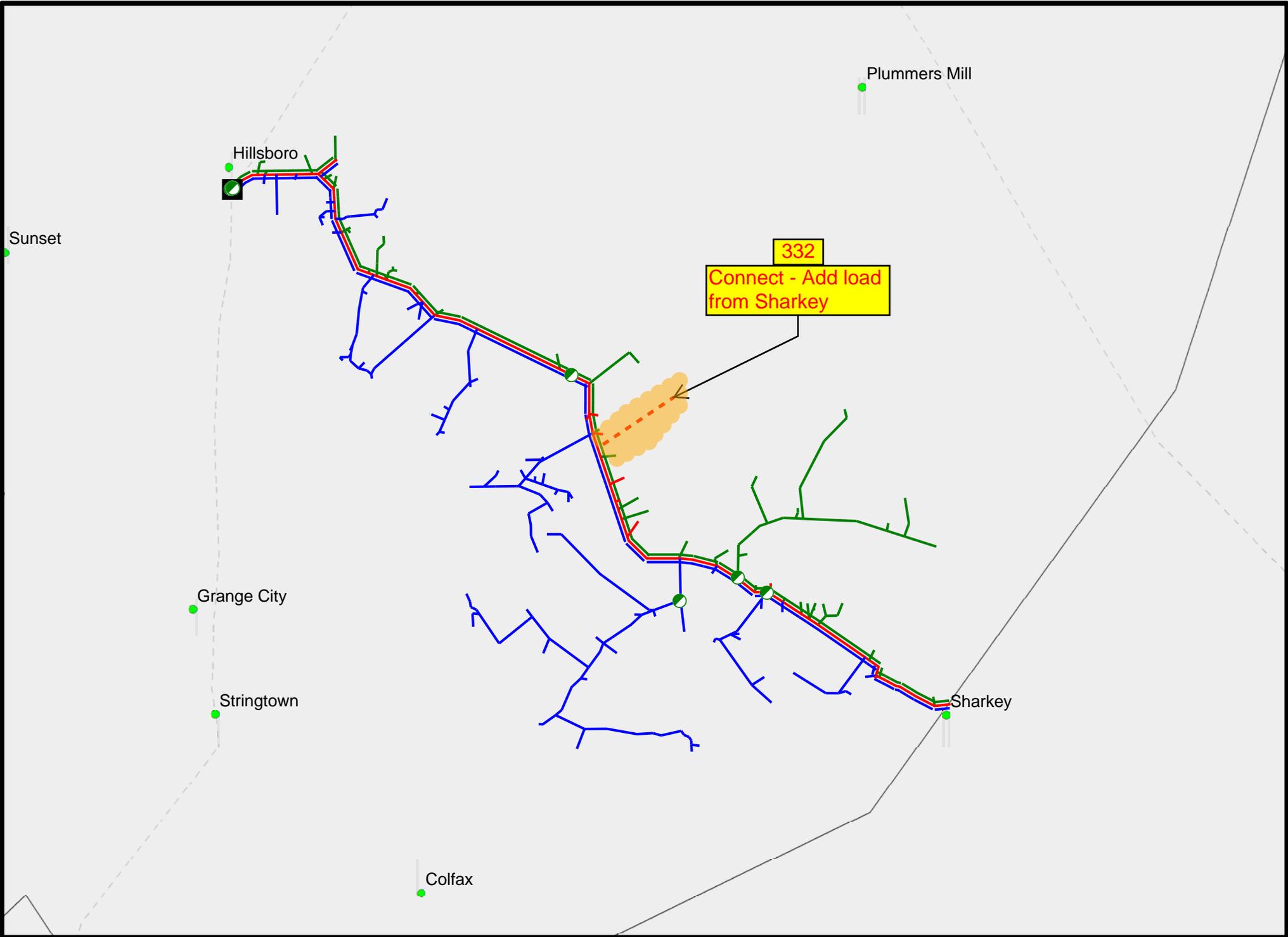
Grange City

Stringtown

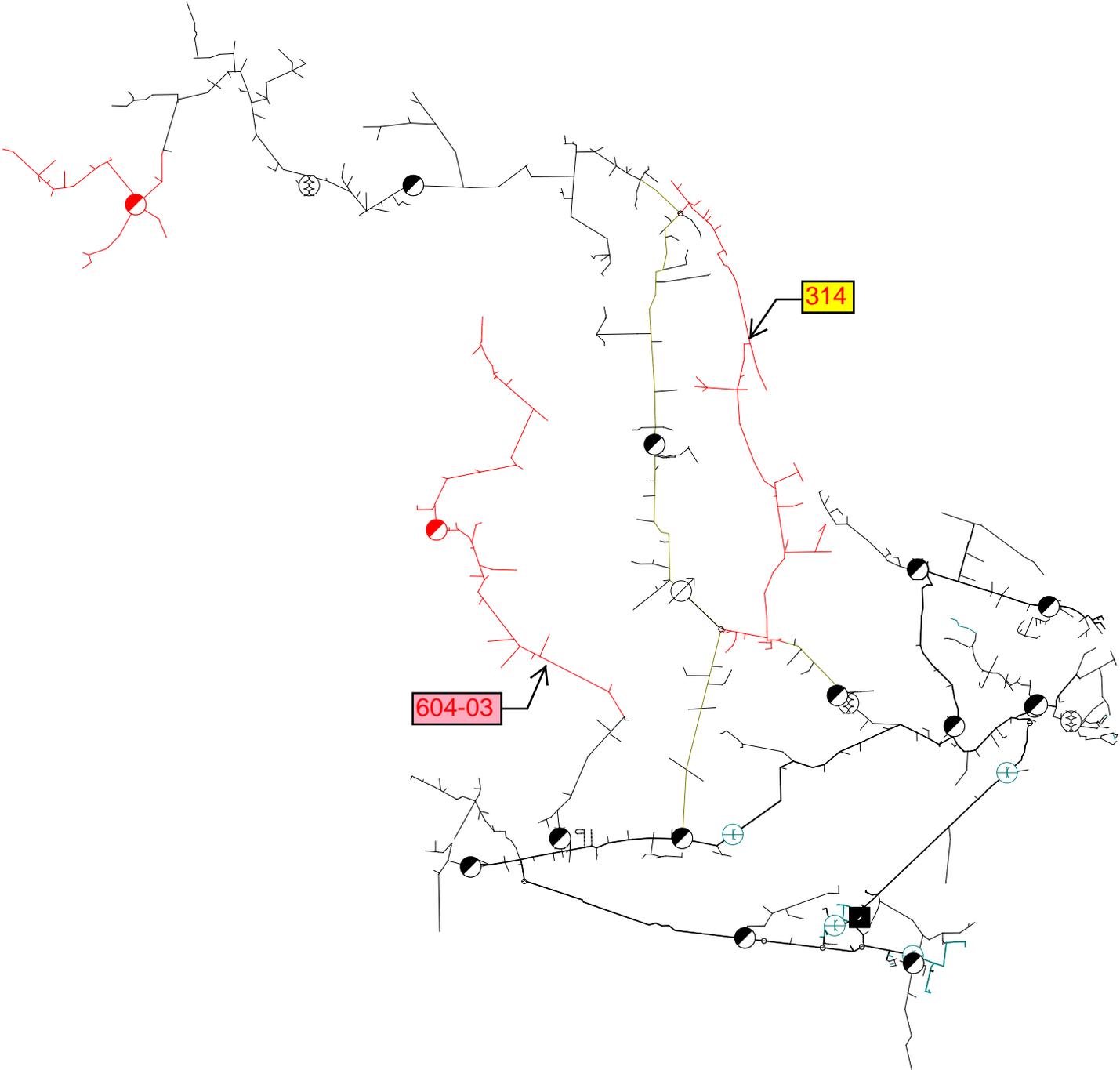
Remove 3 Autos

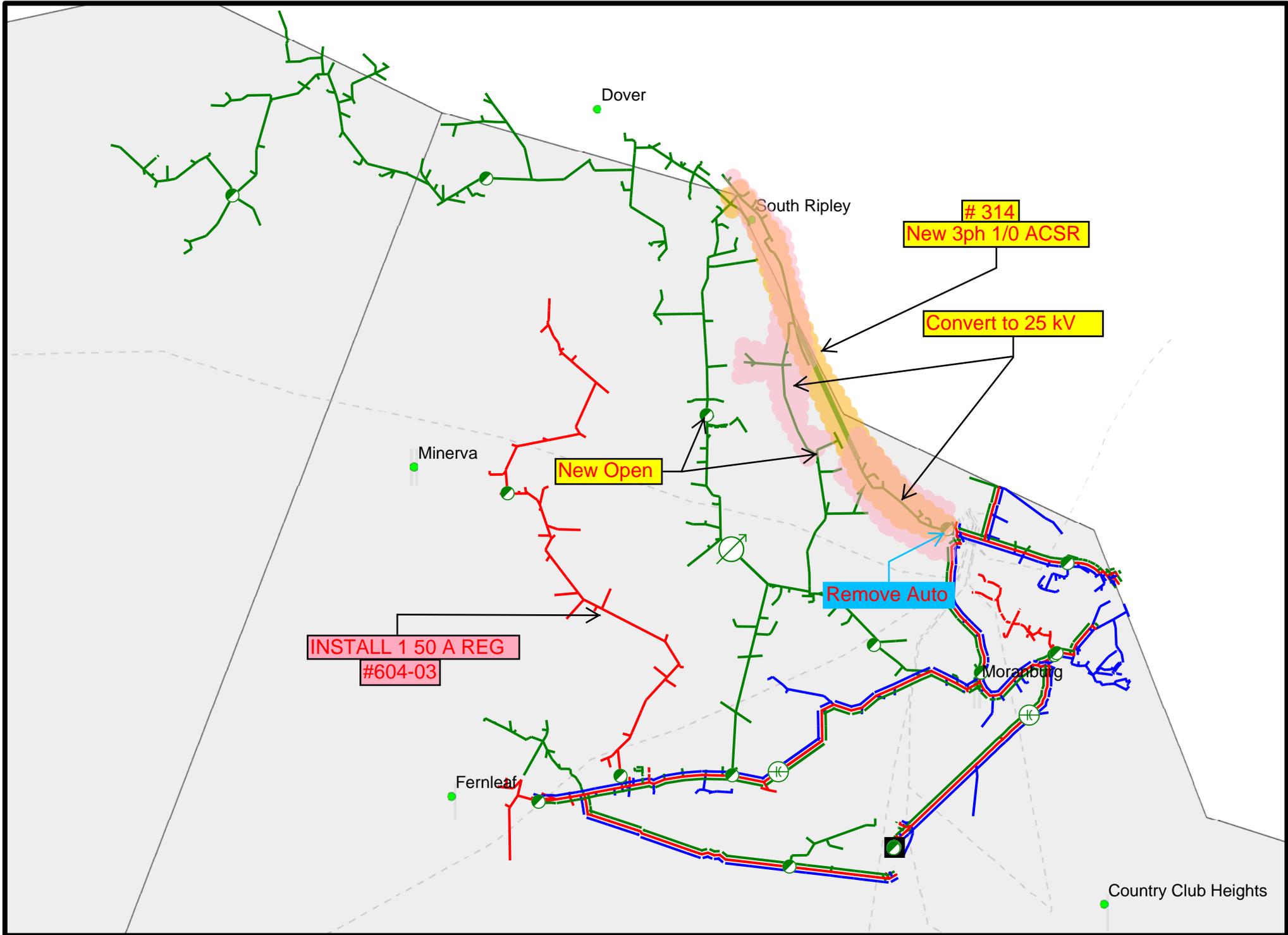
Add 1ph Auto



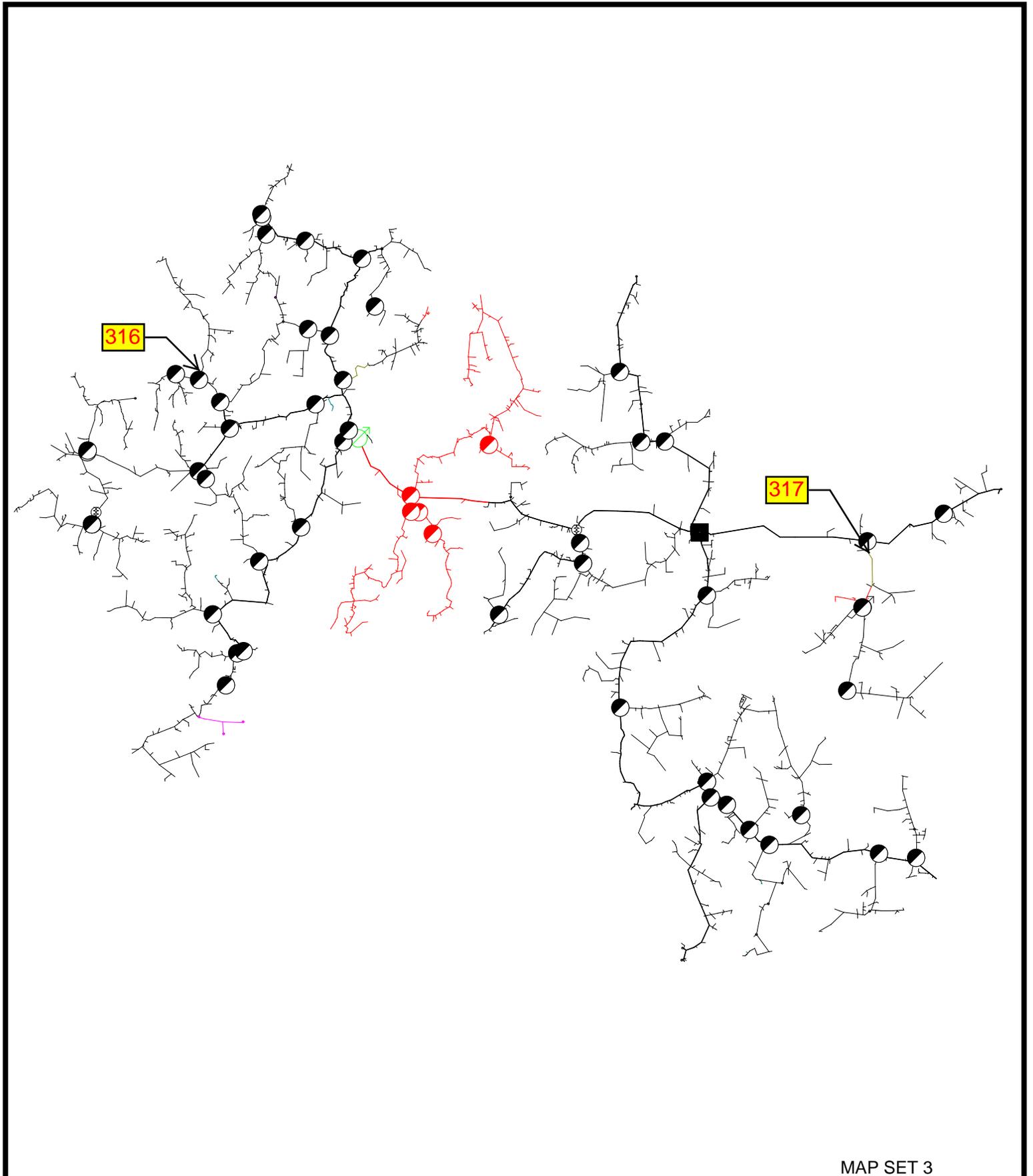


Fleming Mason Energy Maysville Substation

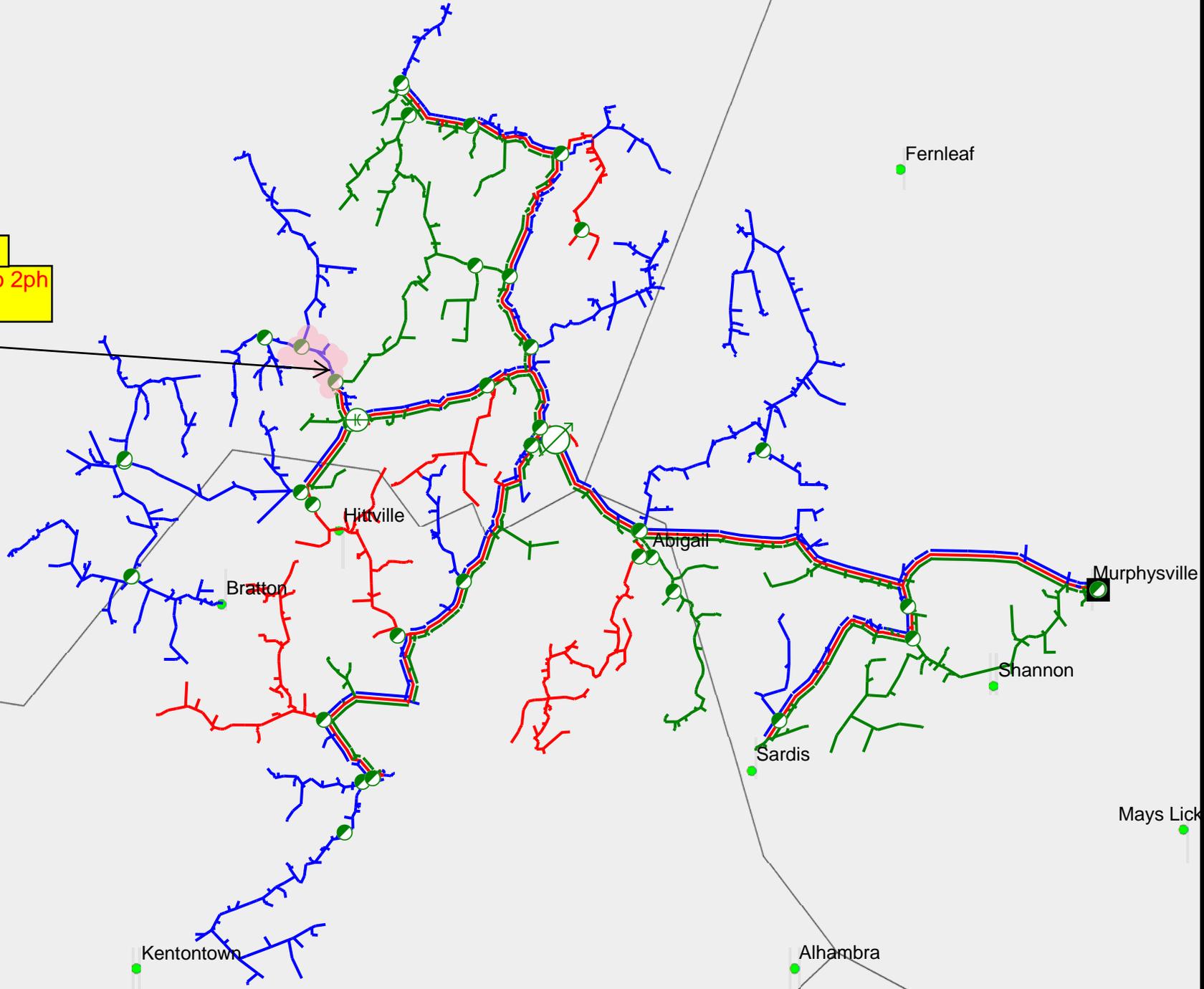




Fleming Mason Energy Murphysville Substation



316
Convert to 2ph
1/0 ACSR



Murphysville

Lewisburg

Marshall

Mays Lick

Remove Auto

REMOVE REG

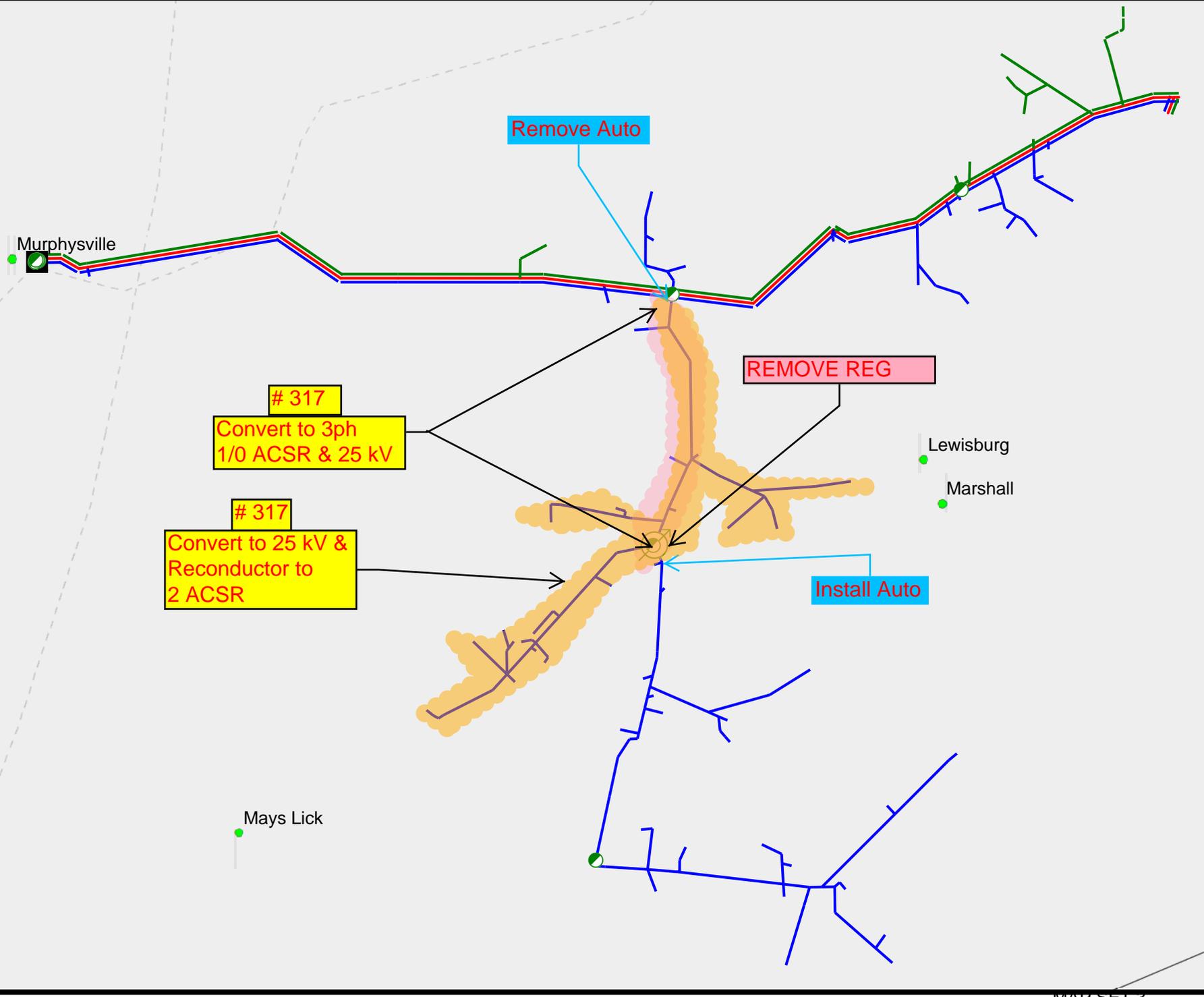
Install Auto

317

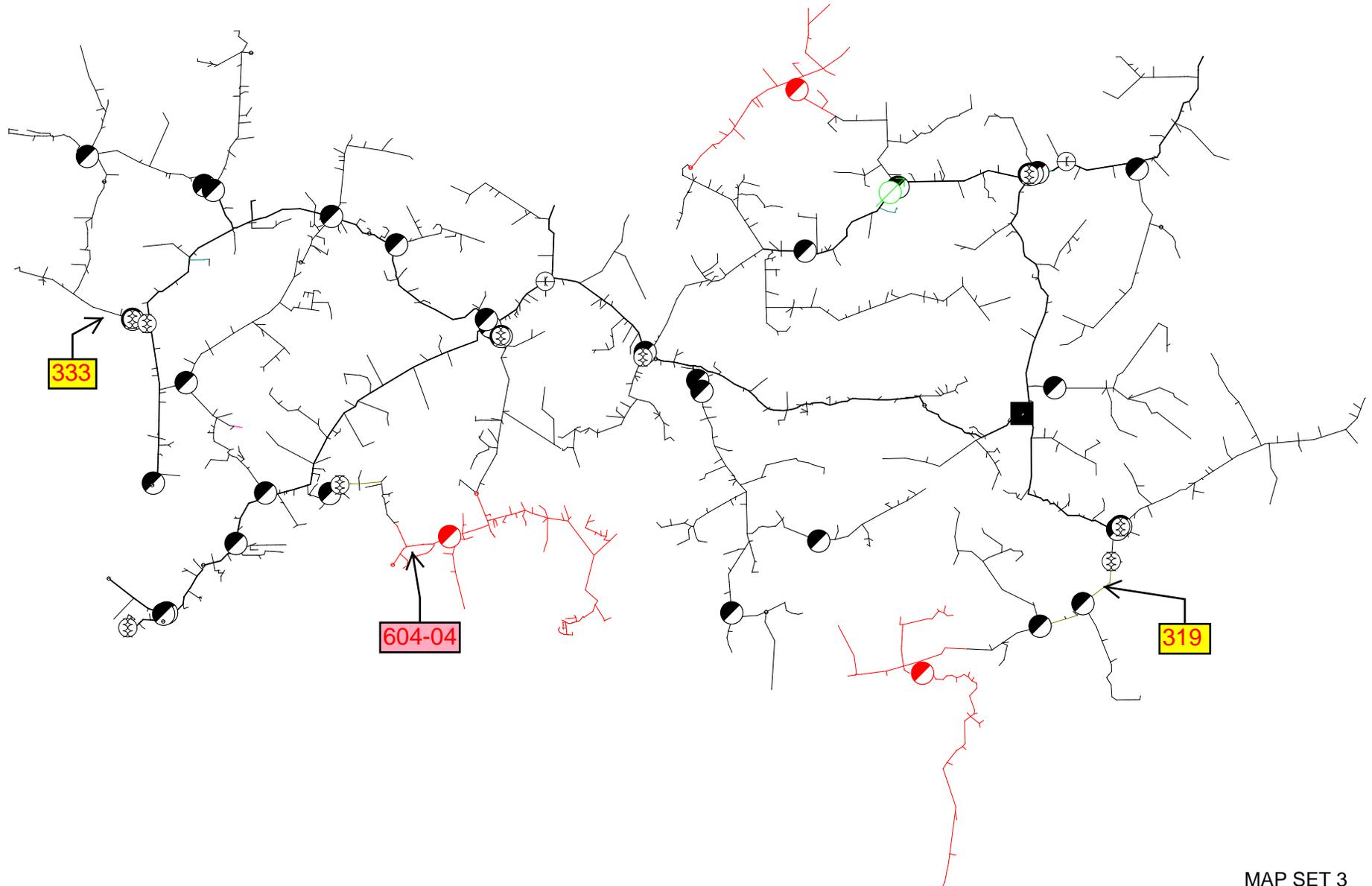
Convert to 3ph
1/0 ACSR & 25 kV

317

Convert to 25 kV &
Reconductor to
2 ACSR



Fleming Mason Energy Oak Ridge Substation

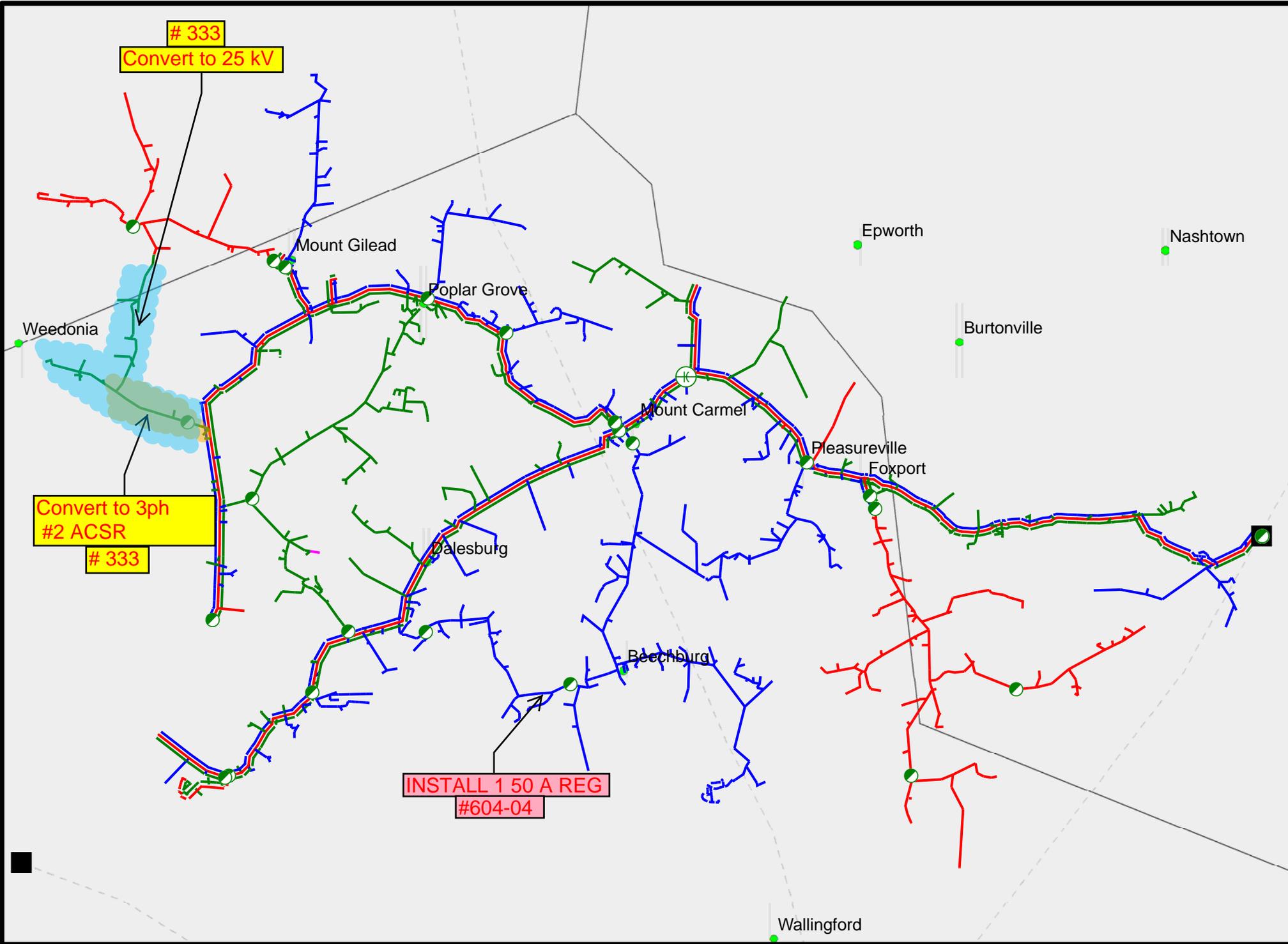


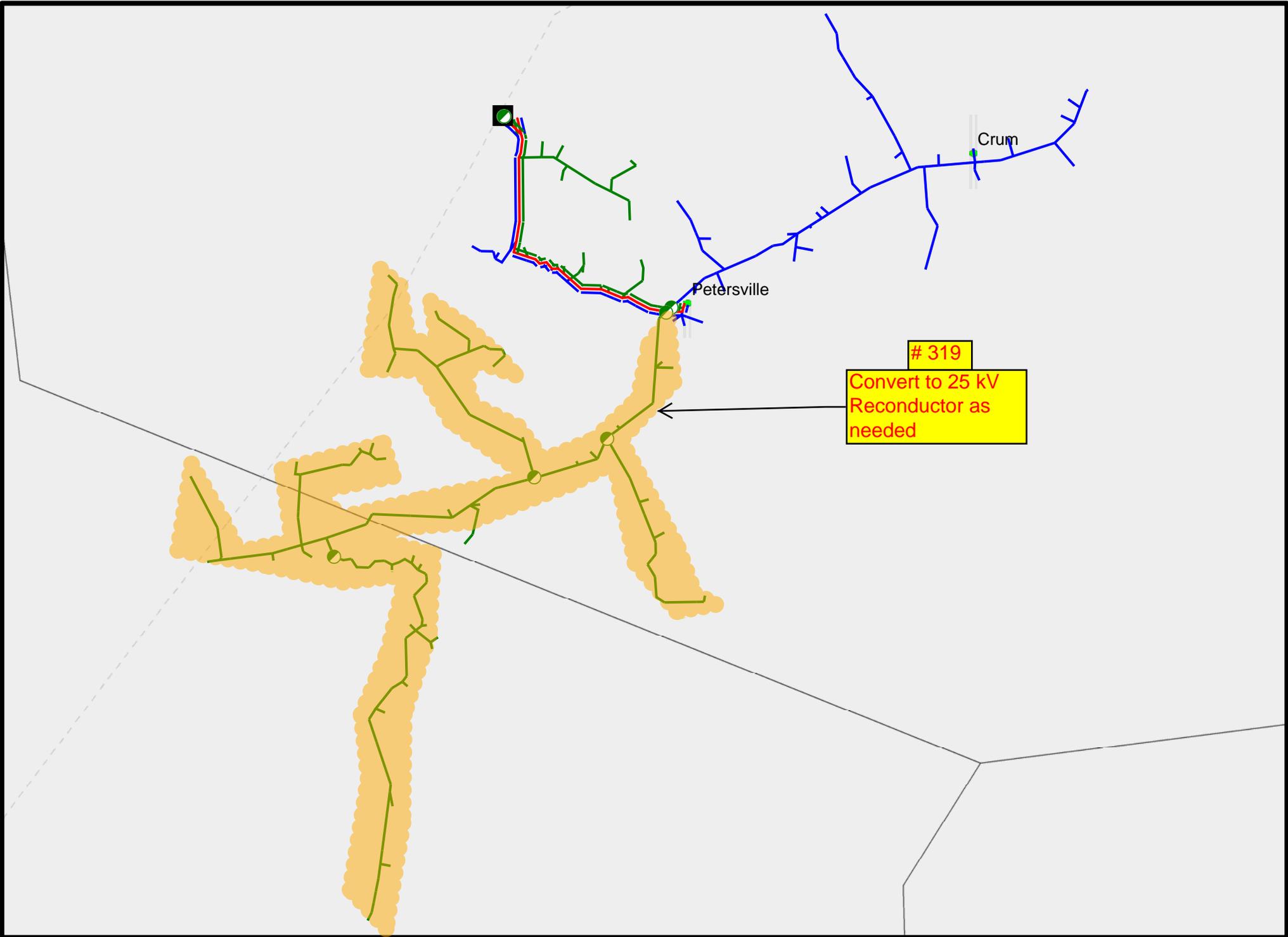
333
Convert to 25 kV

Convert to 3ph
#2 ACSR

333

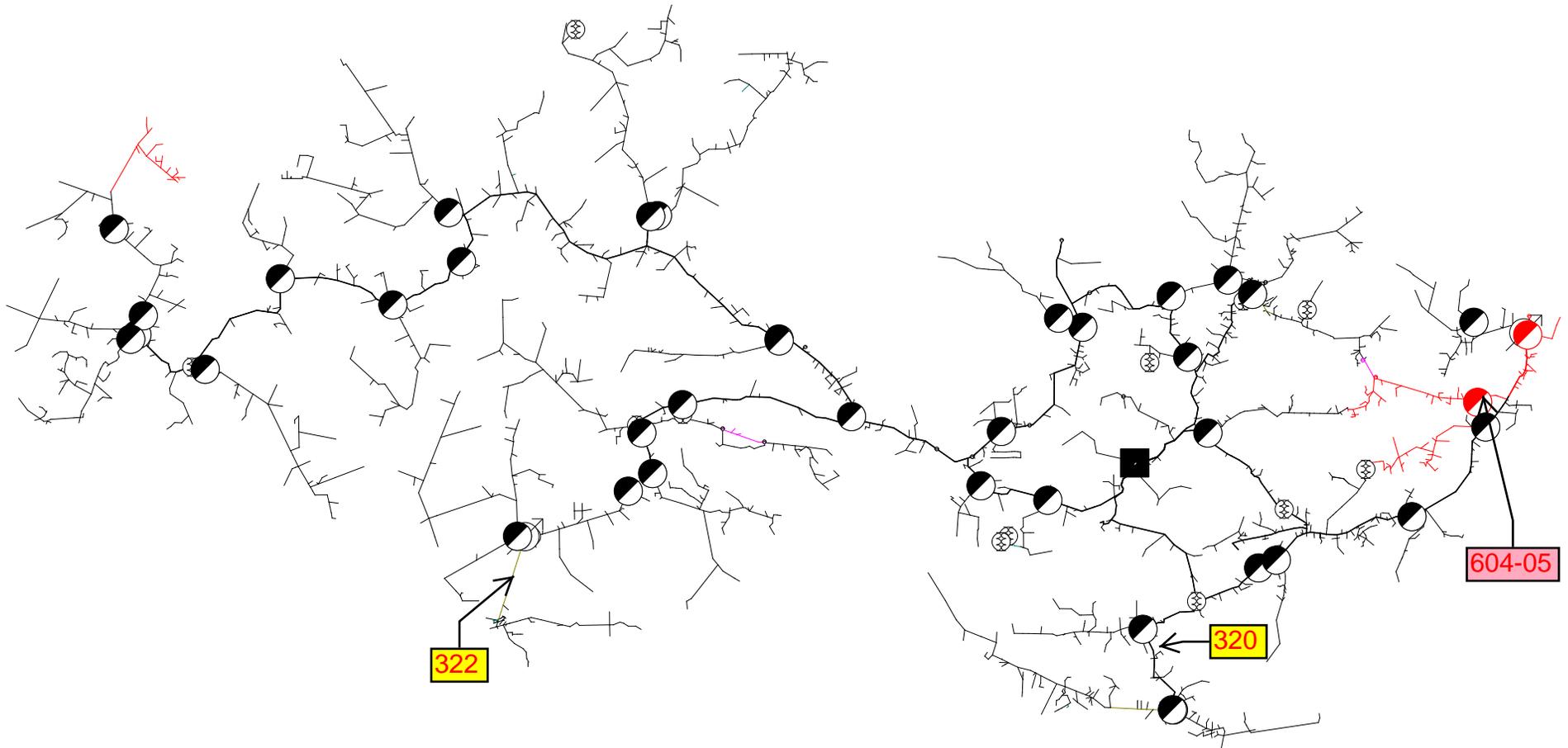
INSTALL 1 50 A REG
#604-04

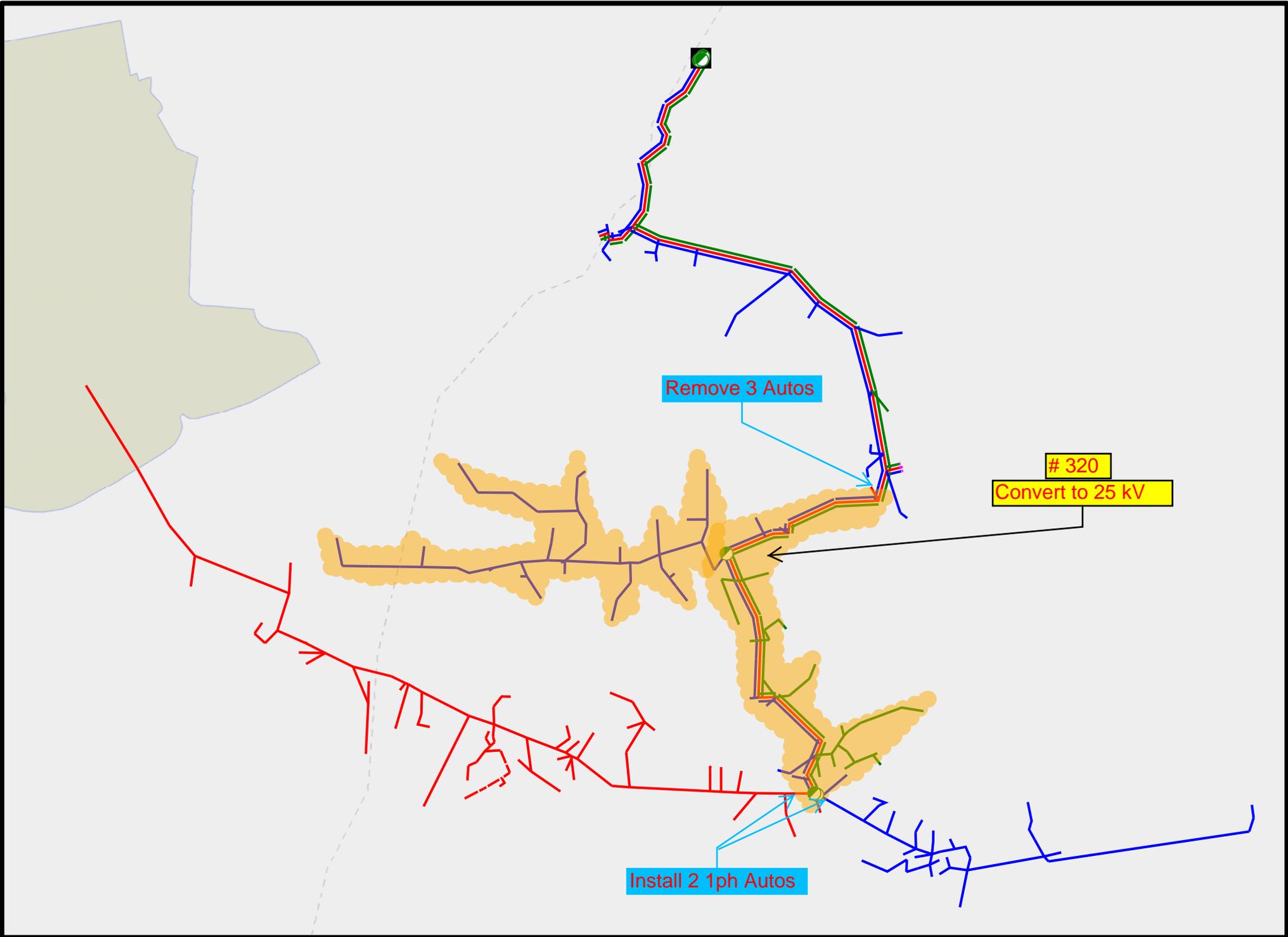




319
Convert to 25 kV
Reconductor as
needed

Fleming Mason Energy Peasticks Substation



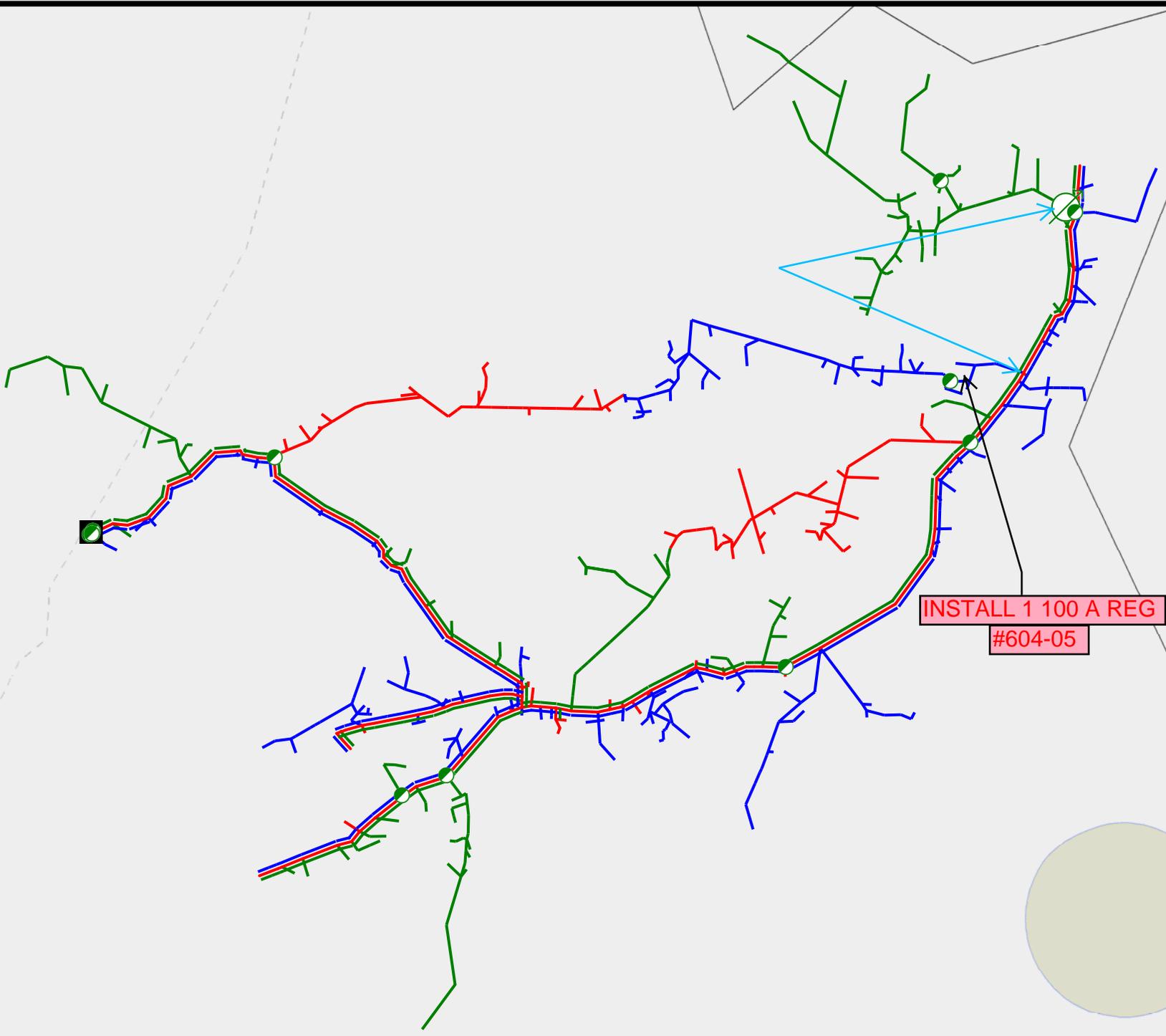


Remove 3 Autos

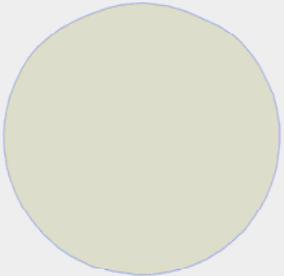
320
Convert to 25 kV

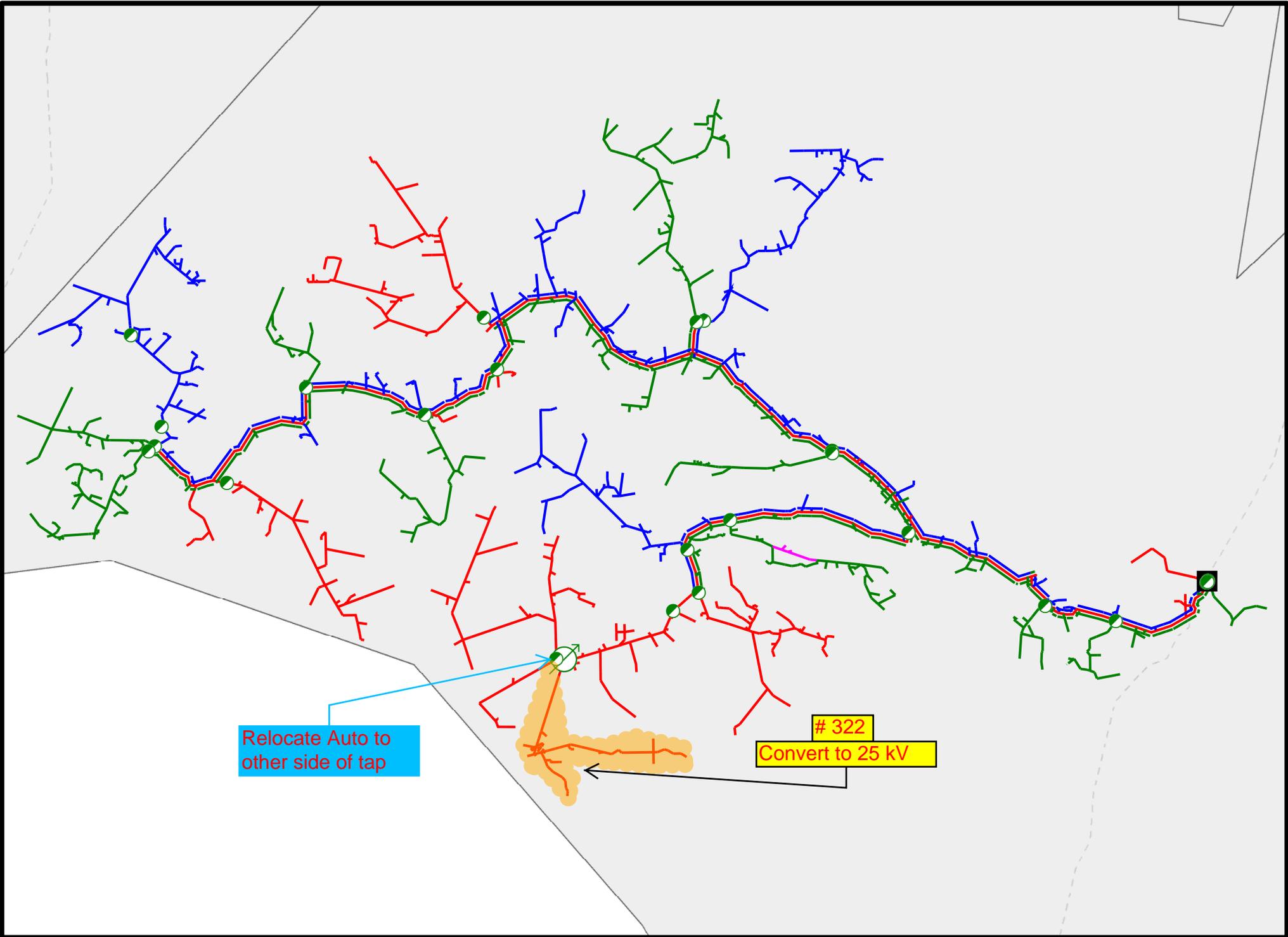
Install 2 1ph Autos





INSTALL 1 100 A REG
#604-05



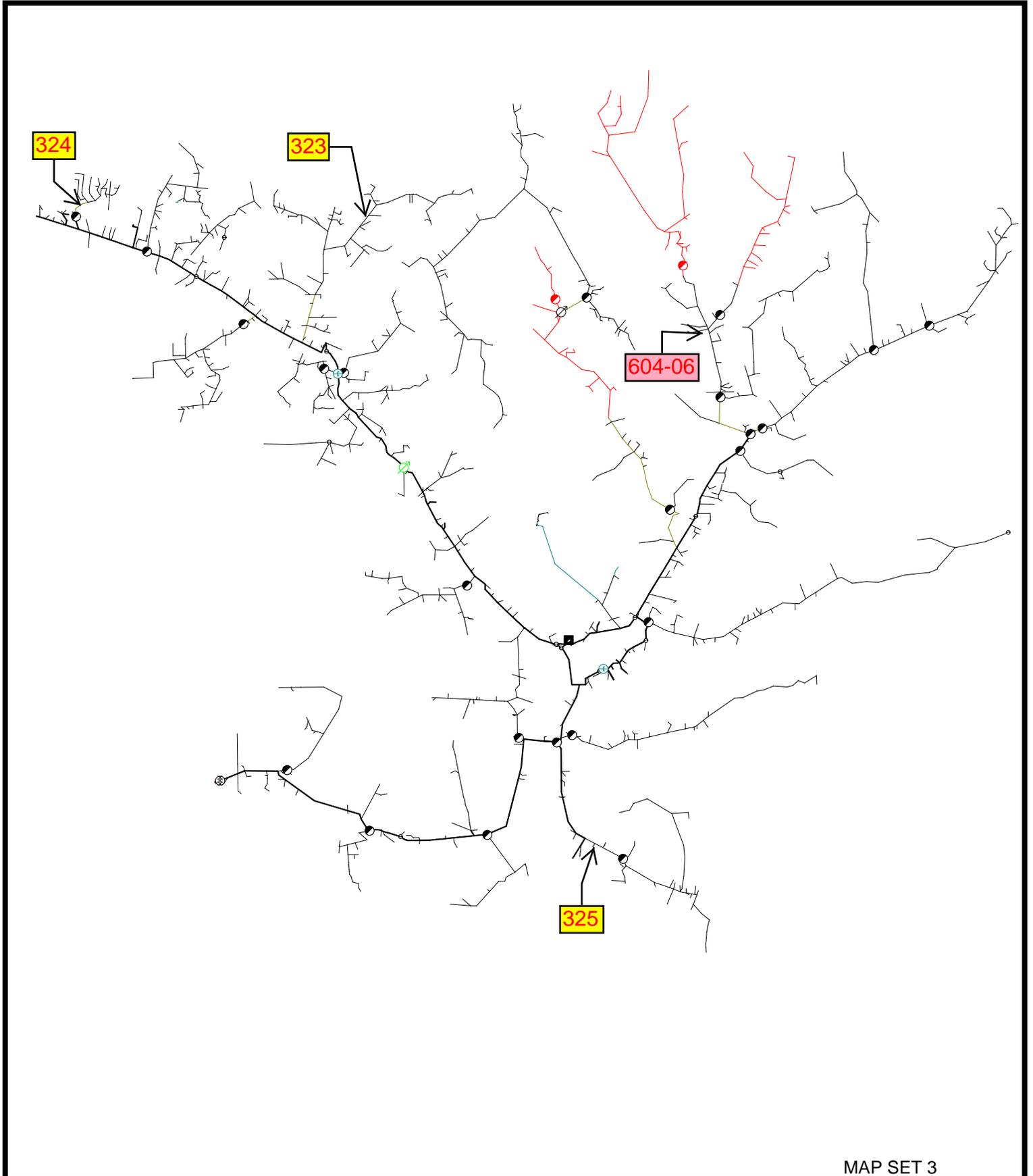


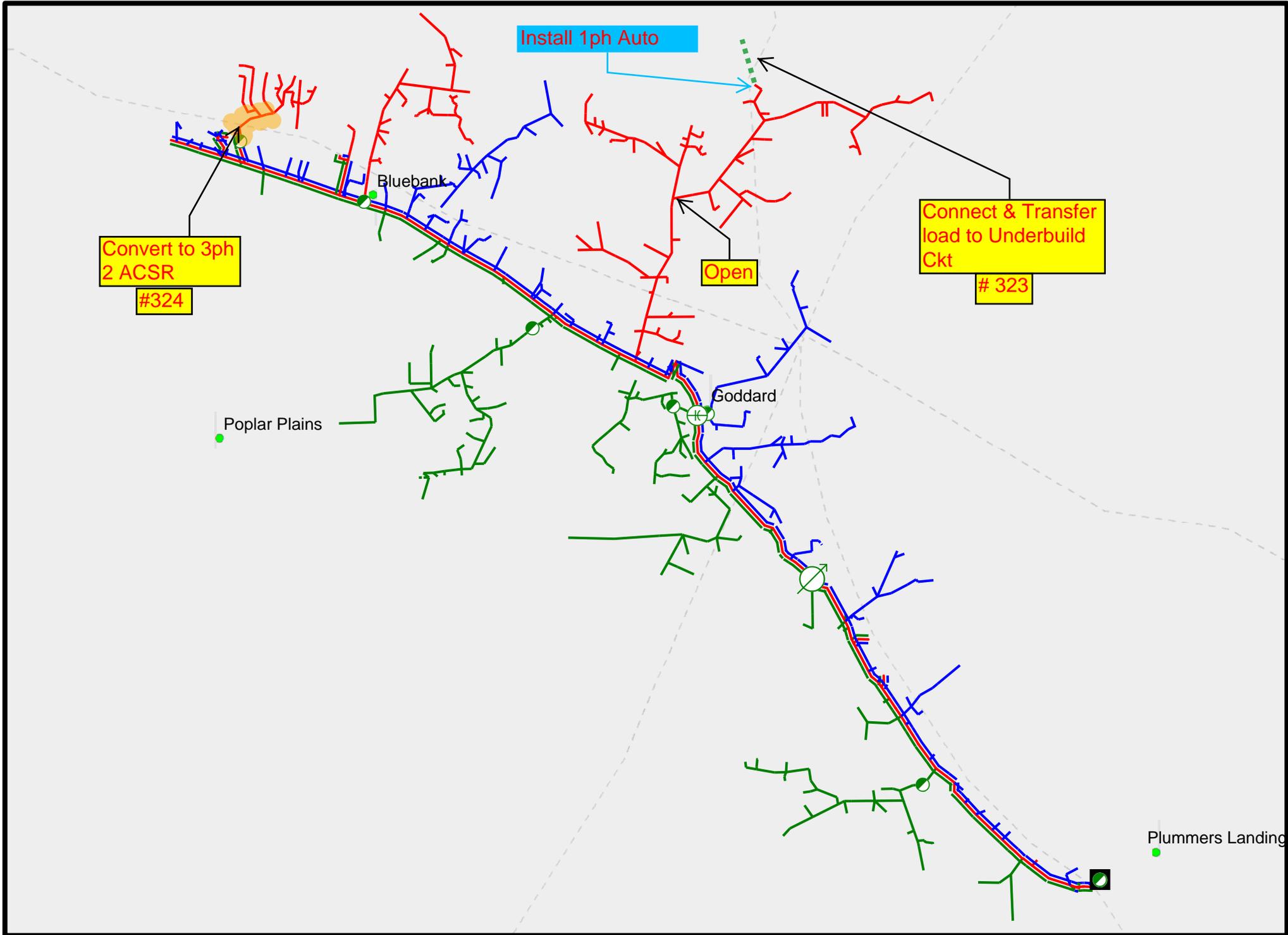
Relocate Auto to other side of tap

322
Convert to 25 kV



Fleming Mason Energy Plummers Landing Substation





Convert to 3ph
2 ACSR

#324

Install 1ph Auto

Open

Connect & Transfer
load to Underbuild
Ckt

323

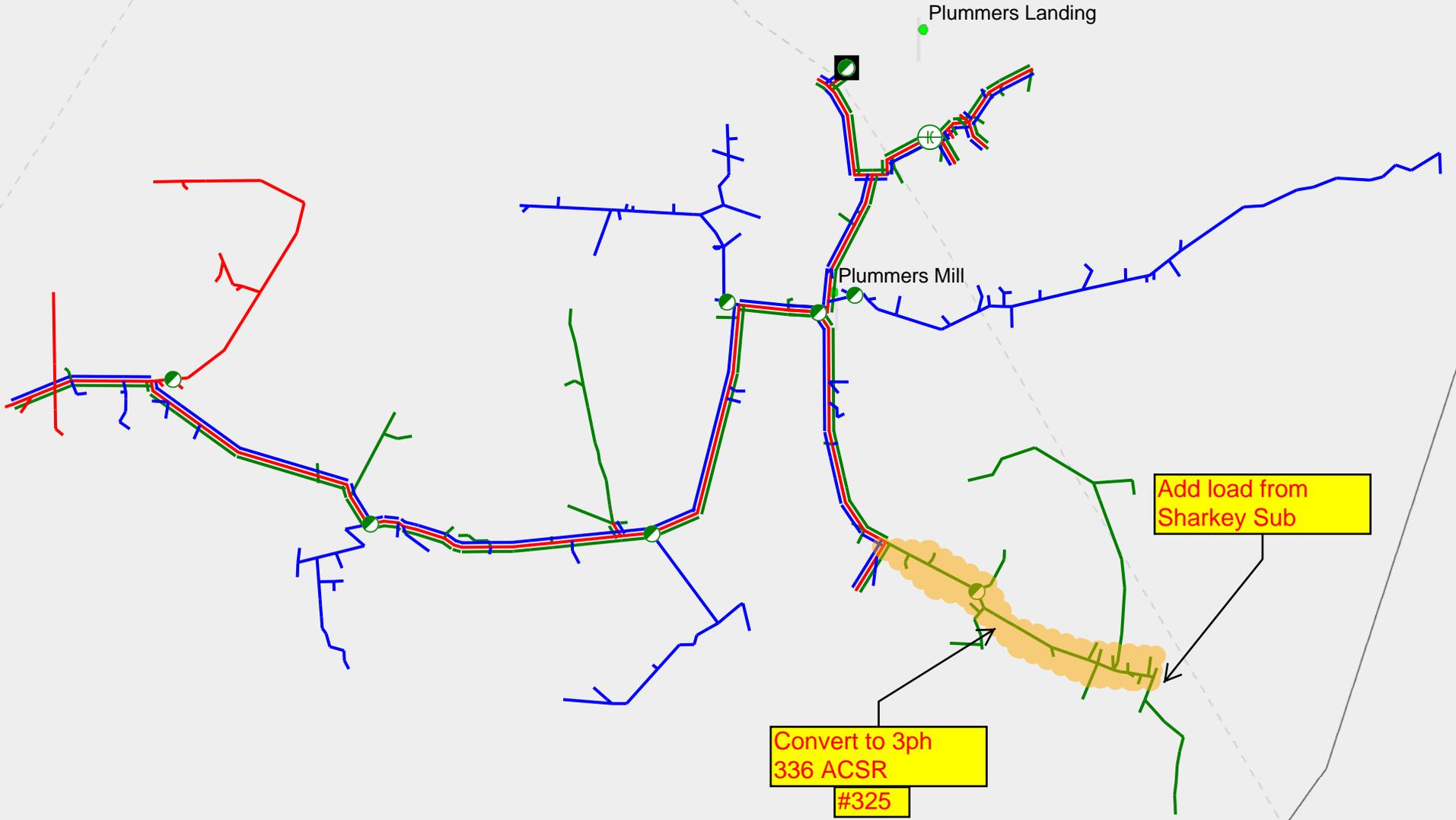
Poplar Plains

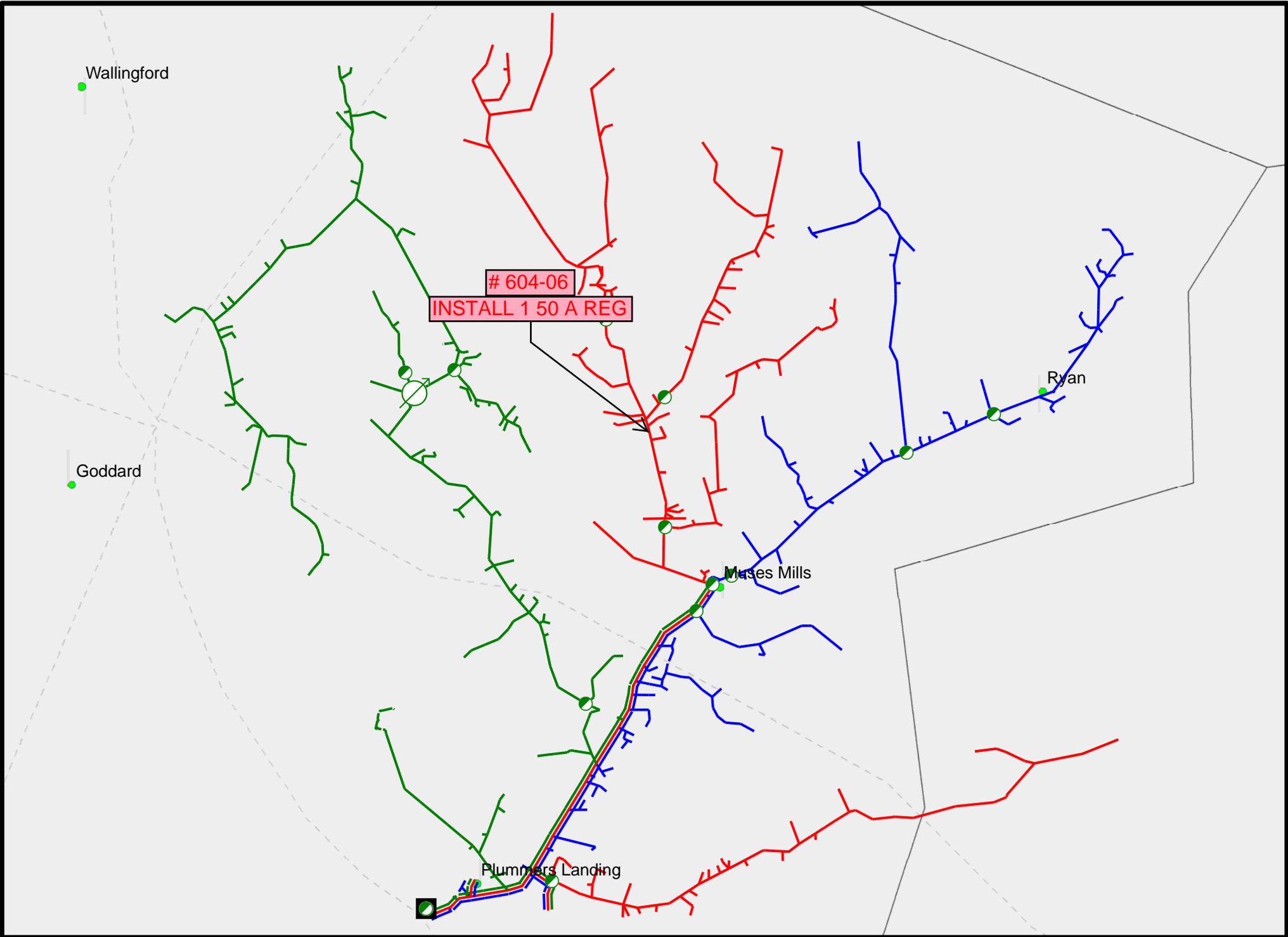
Bluebank

Goddard

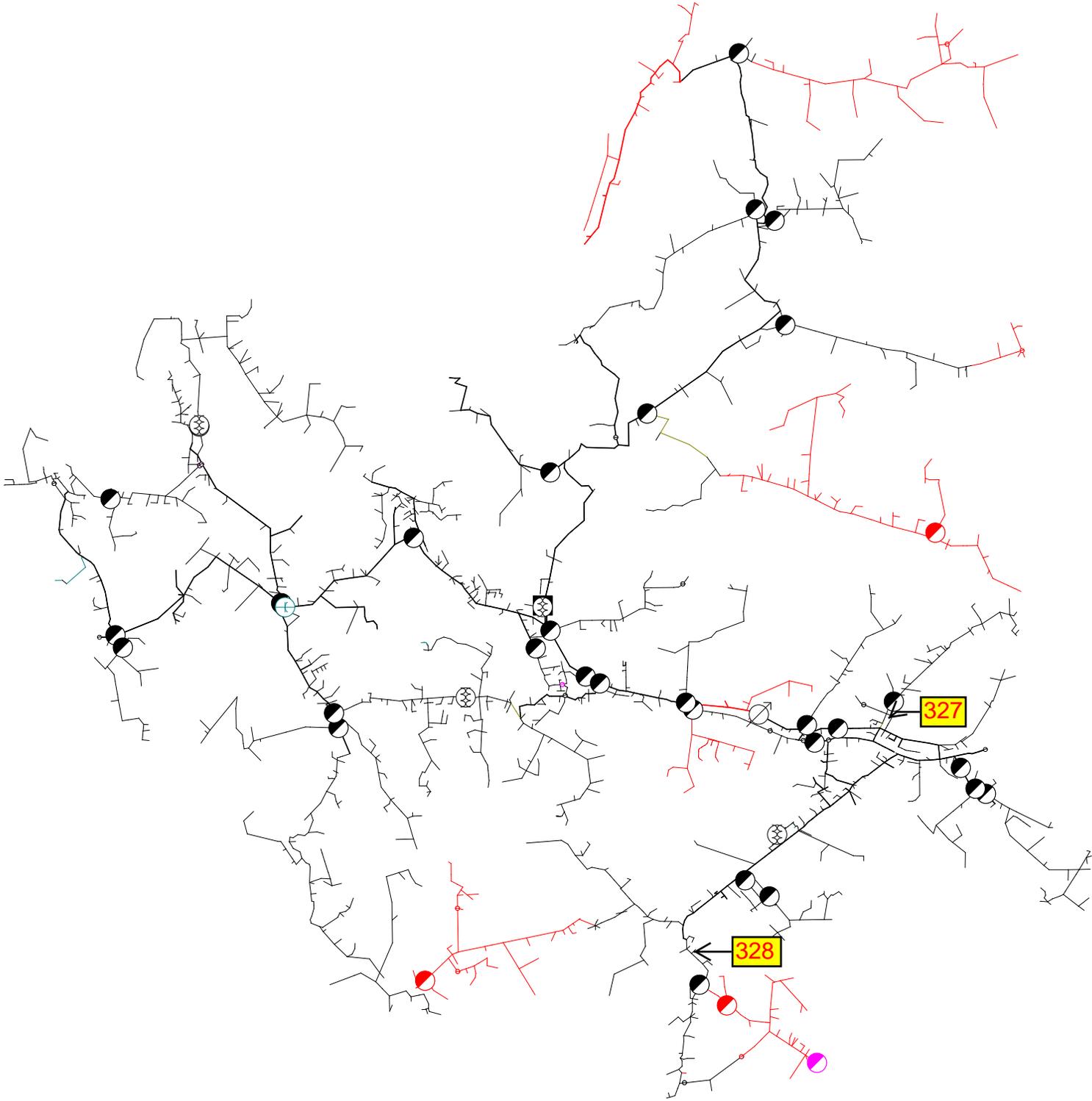
Plummers Landing

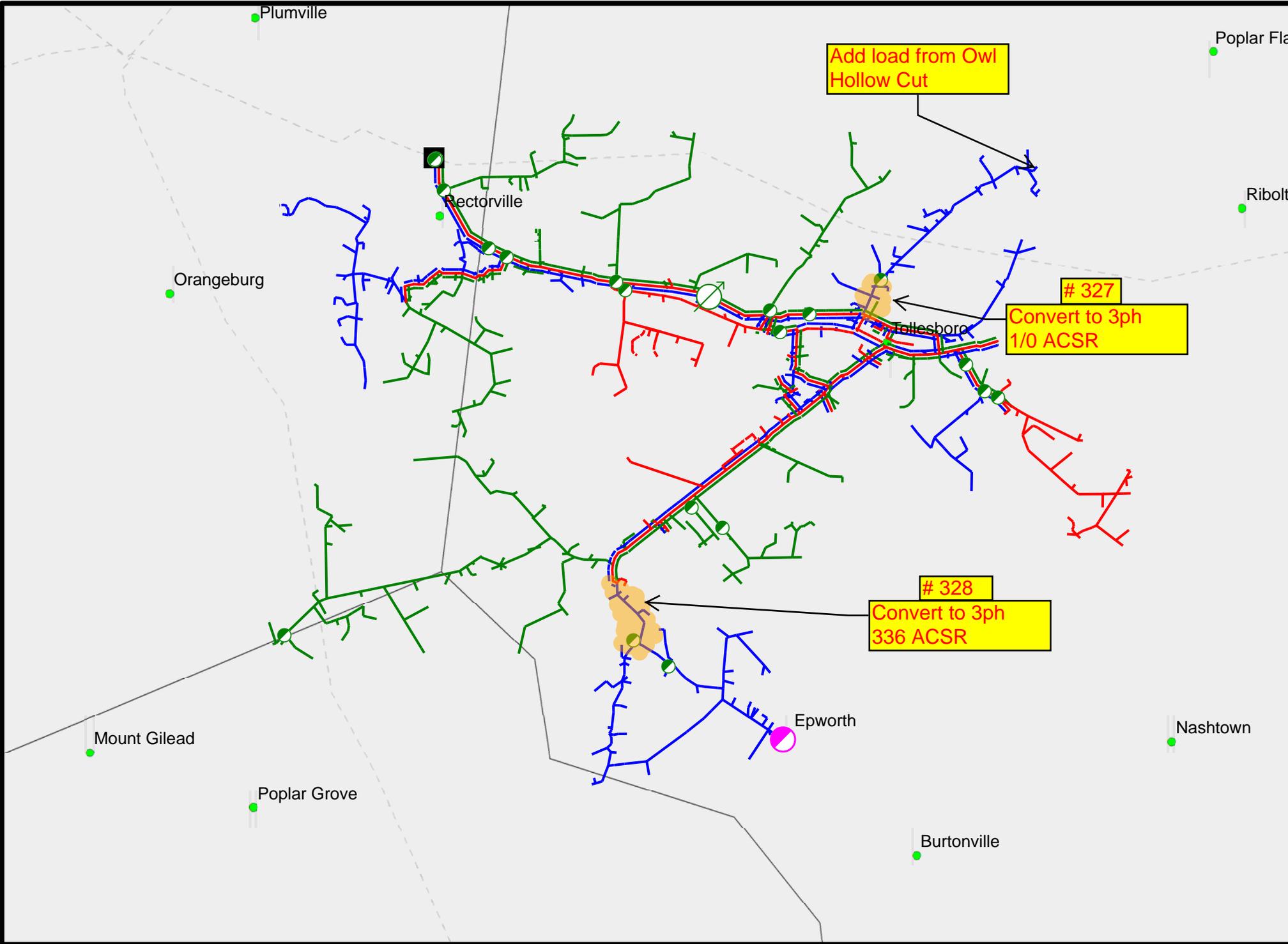






Fleming Mason Energy Rectorville Substation





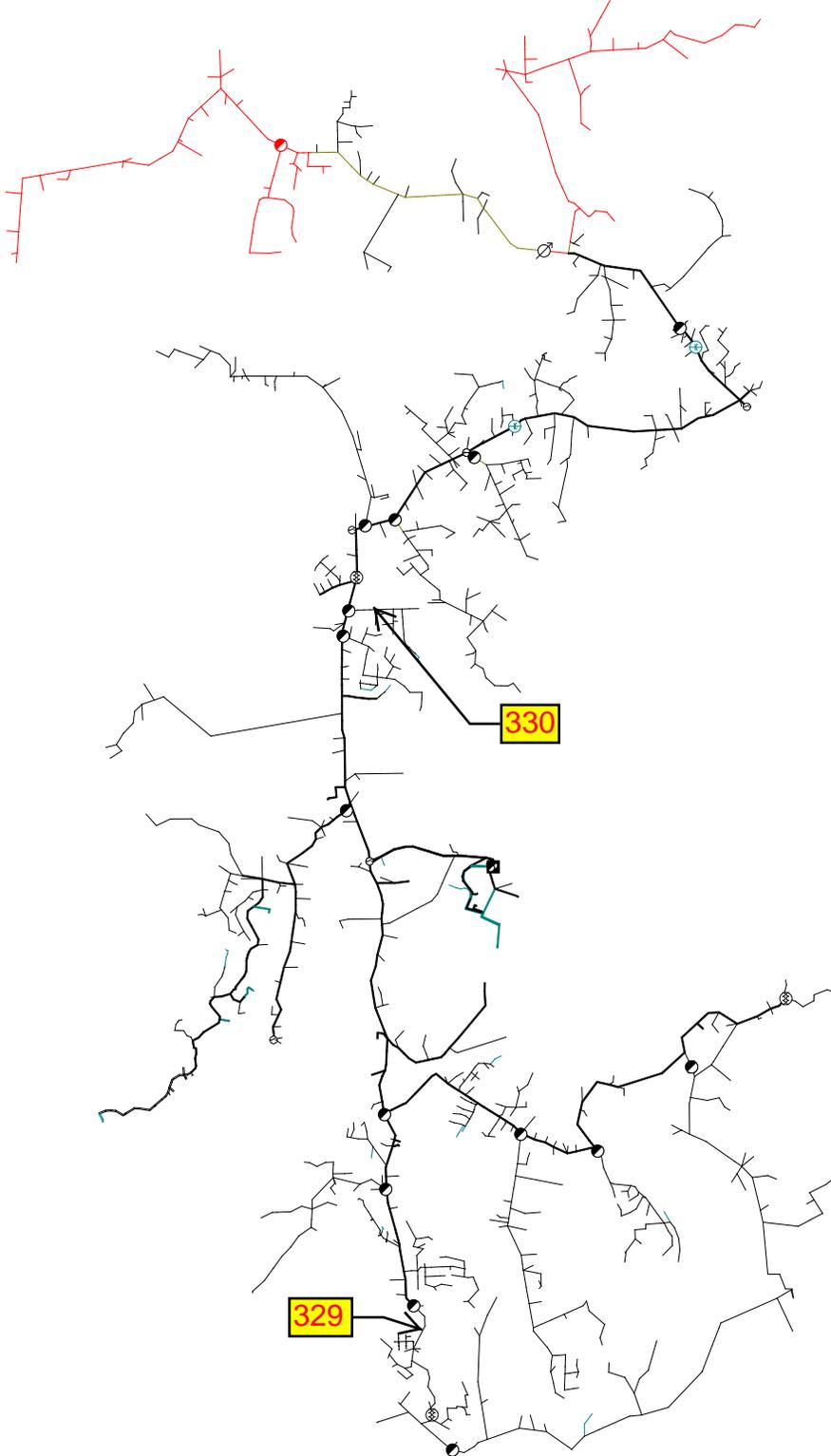
Add load from Owl Hollow Cut

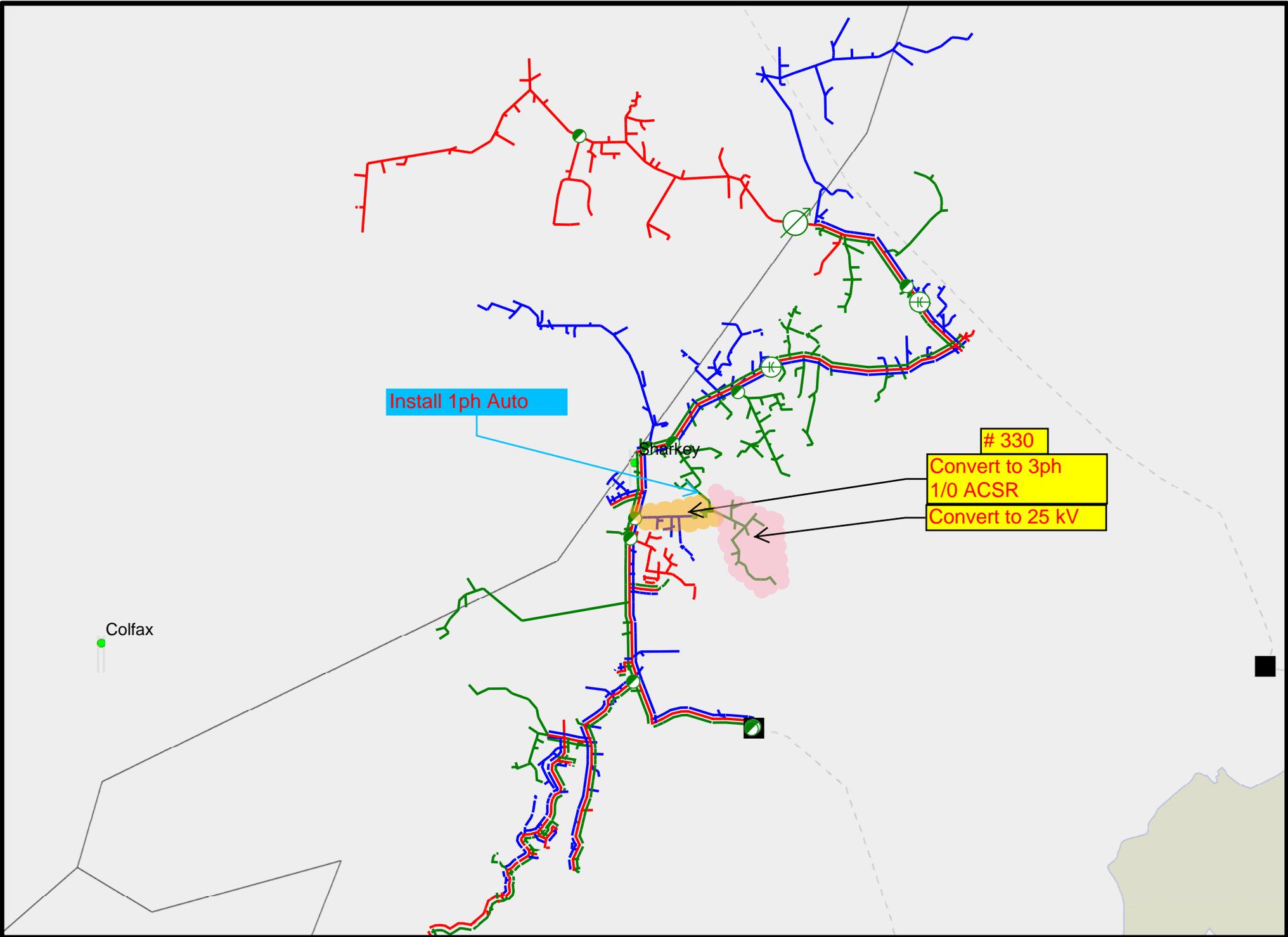
327
Convert to 3ph
1/0 ACSR

328
Convert to 3ph
336 ACSR



Fleming Mason Energy Sharkey Substation





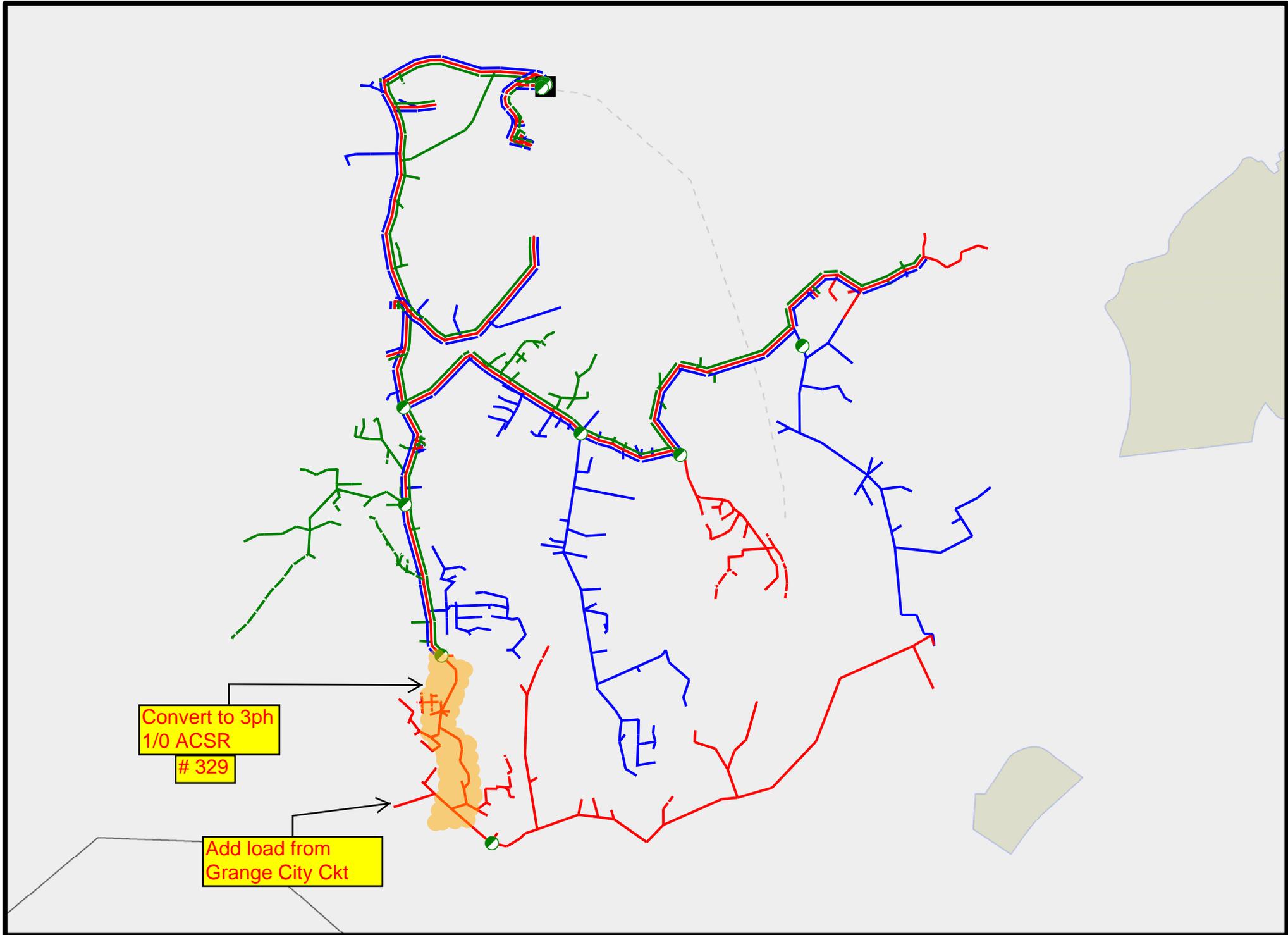
Install 1ph Auto

330
Convert to 3ph
1/0 ACSR
Convert to 25 kV

Colfax

Sharkey



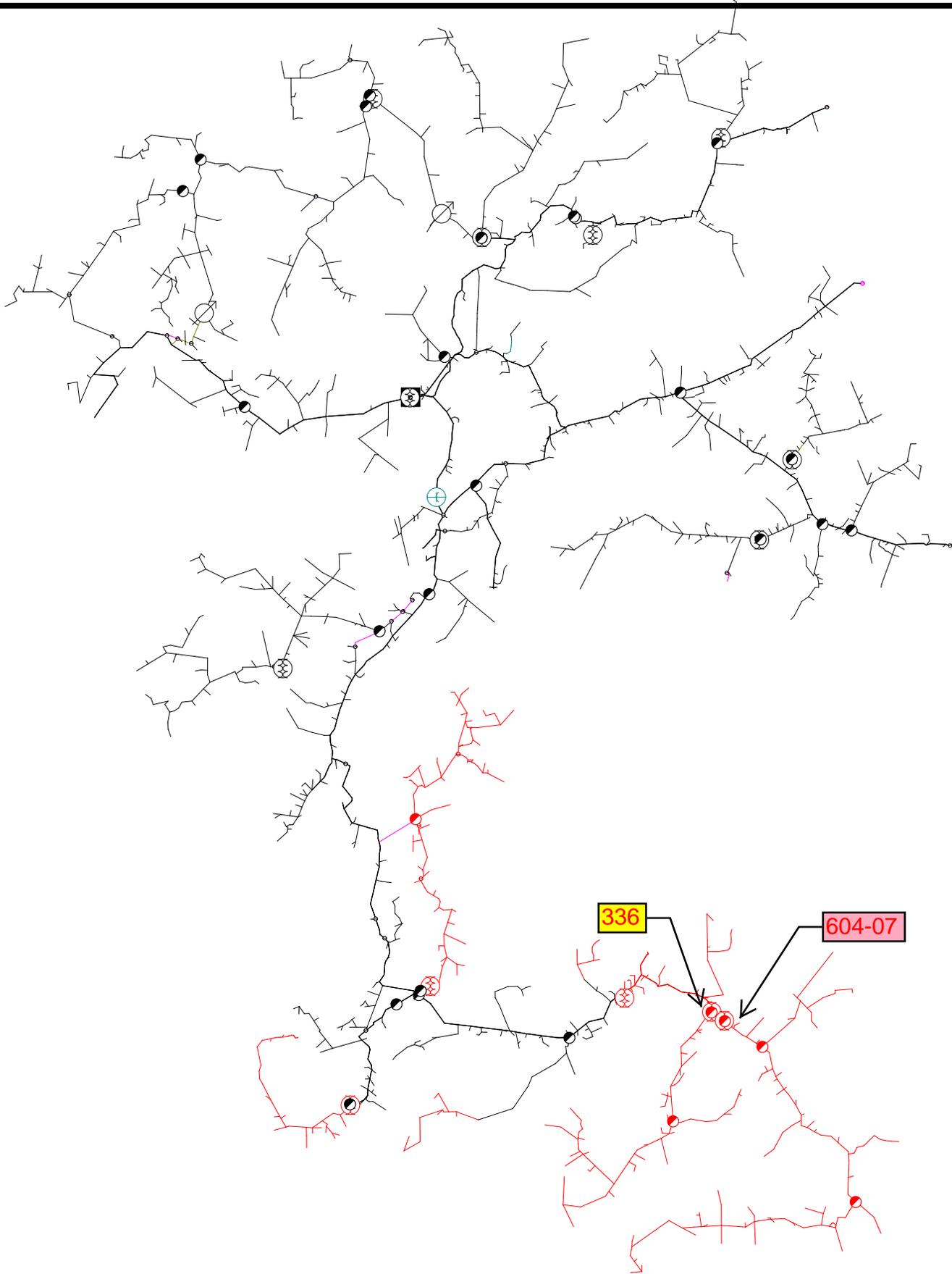


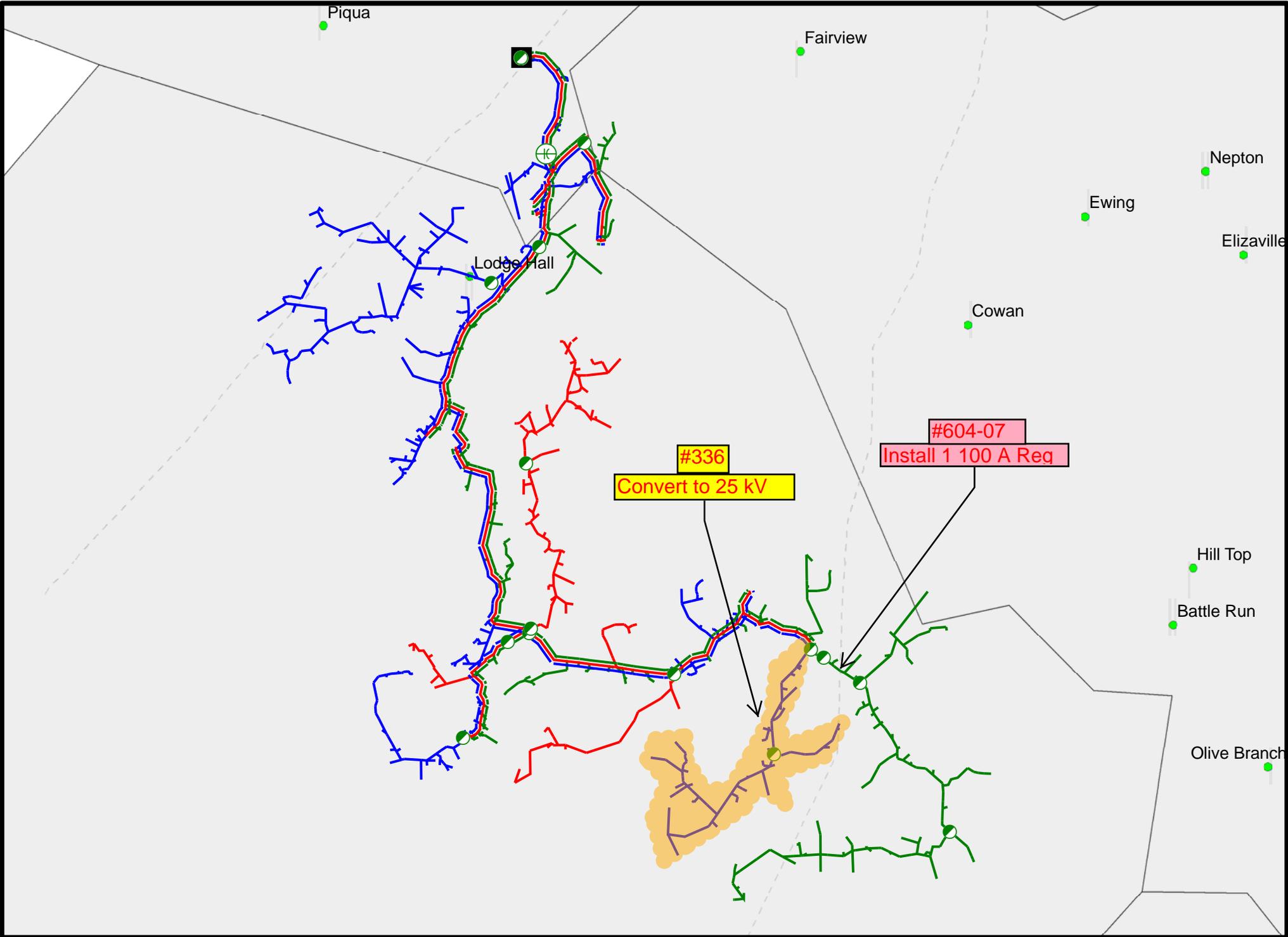
Convert to 3ph
1/0 ACSR
329

Add load from
Grange City Ckt



Fleming Mason Energy Snow Hill Substation





Piqua

Fairview

Nepton

Ewing

Elizaville

Lodge Hall

Cowan

Hill Top

Battle Run

Olive Branch

#336
Convert to 25 kV

#604-07
Install 1 100 A Reg

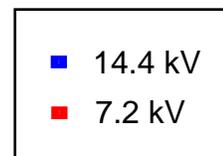
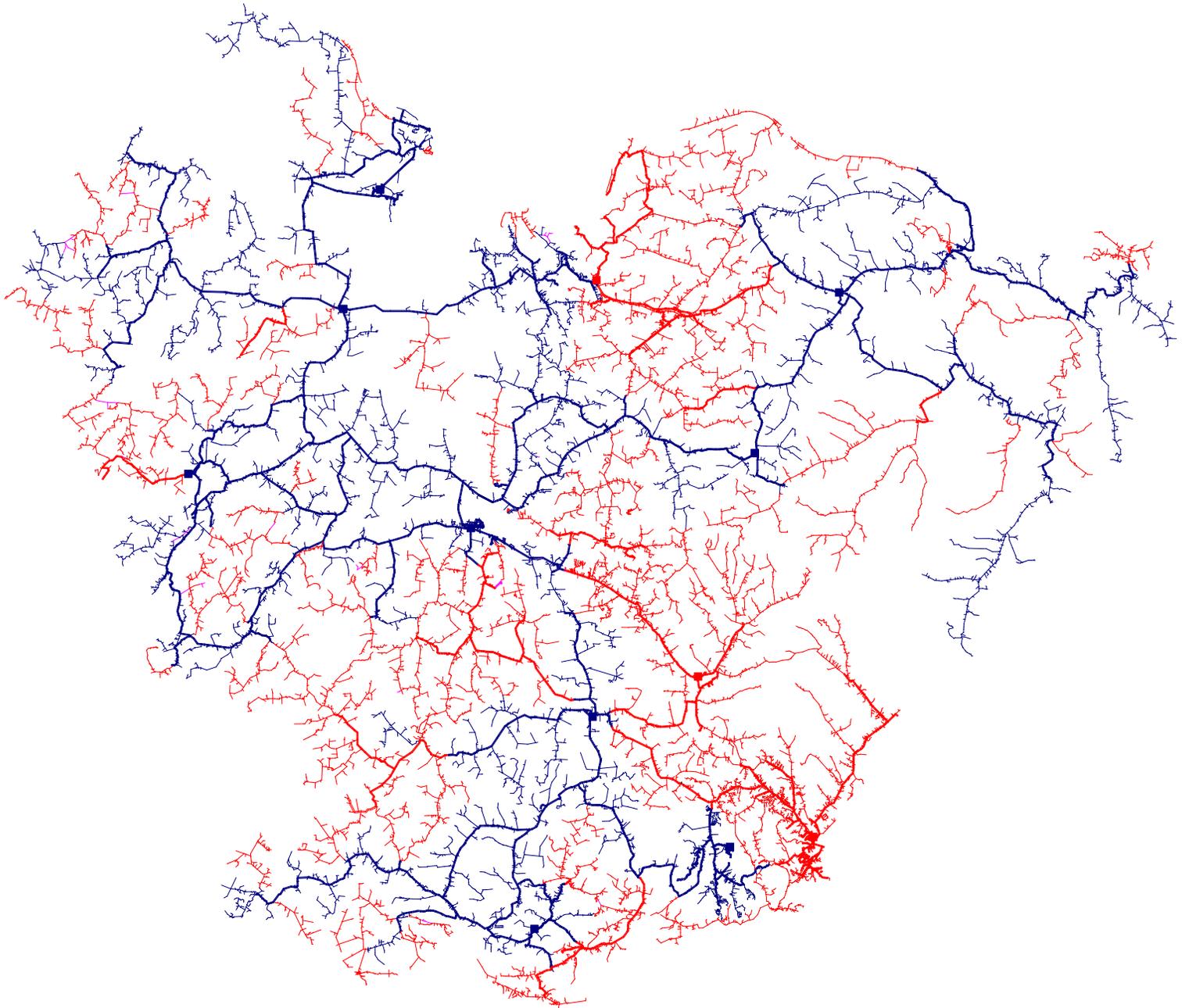


Fleming - Mason Transmission System

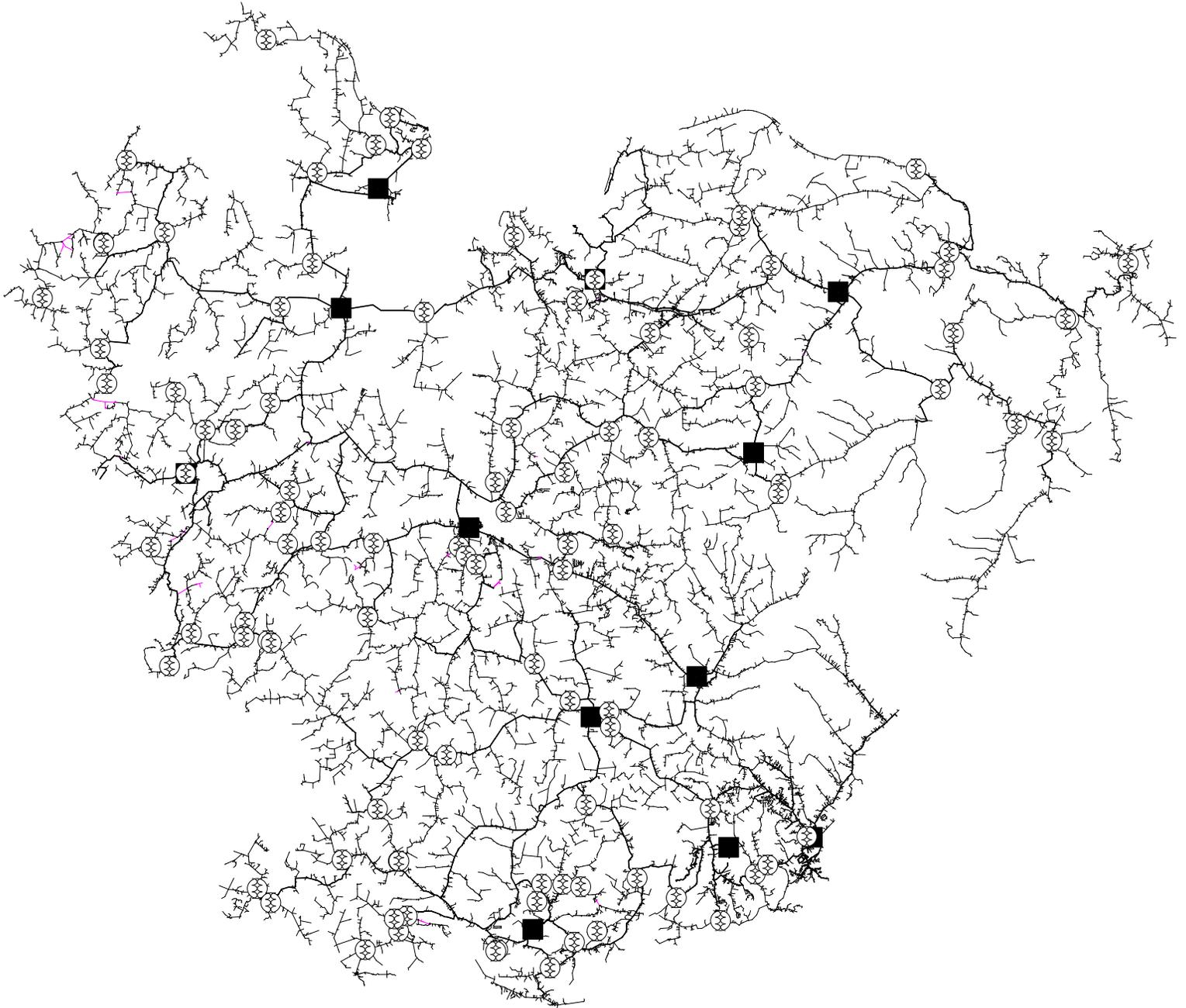


- Legend**
- EKPC Substation
 - Ⓜ EKPC Generation Plant
 - EKPC Transmission**
 - EKPC 69 kV
 - EKPC 138 kV
 - EKPC 161 kV
 - EKPC 345 kV
 - KU Transmission**
 - - - KU 69 kV
 - - - KU 138 kV
 - - - KU 161 kV
 - - - KU 345 kV

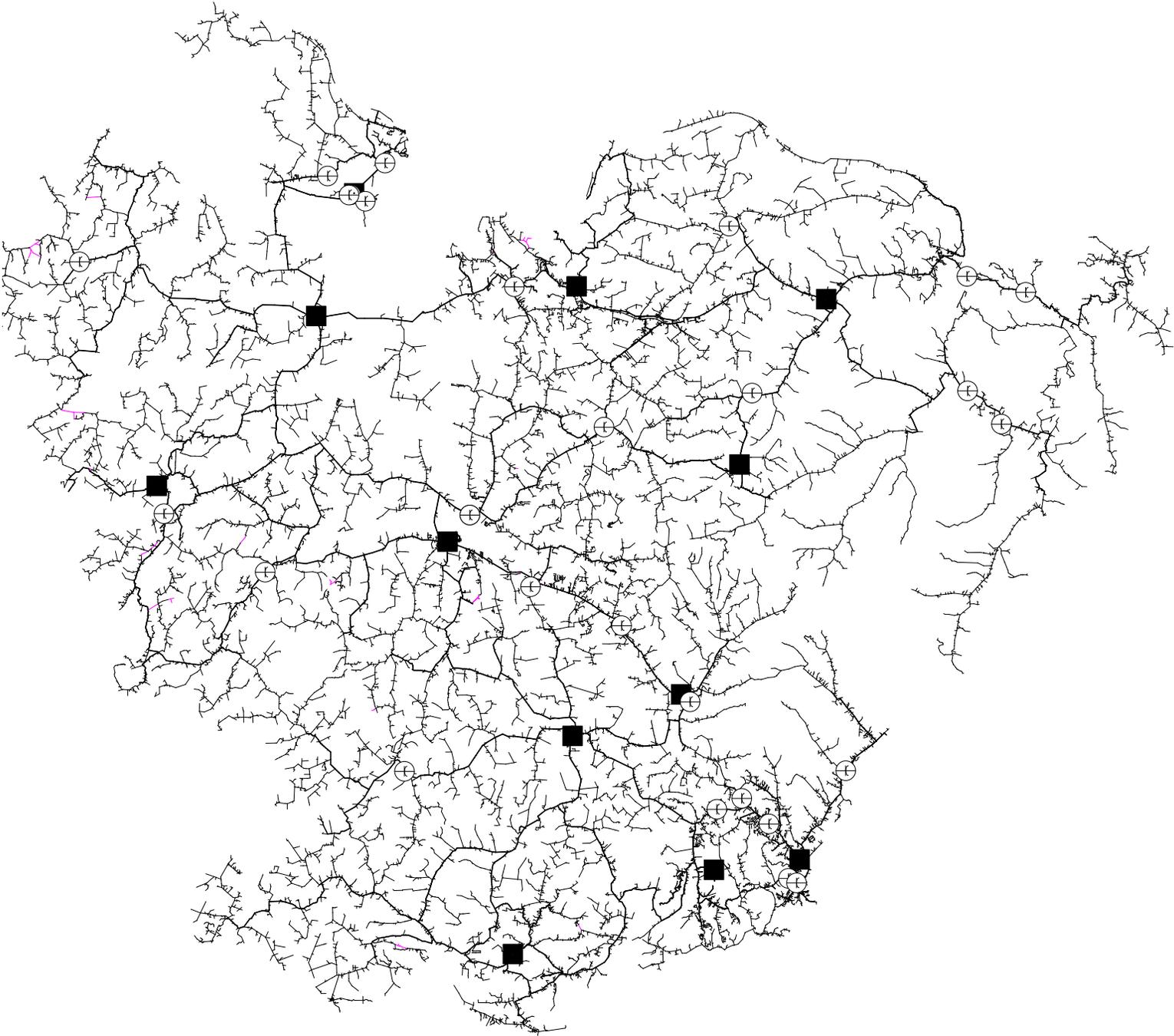
Fleming Mason Energy Primary Voltage Comparison



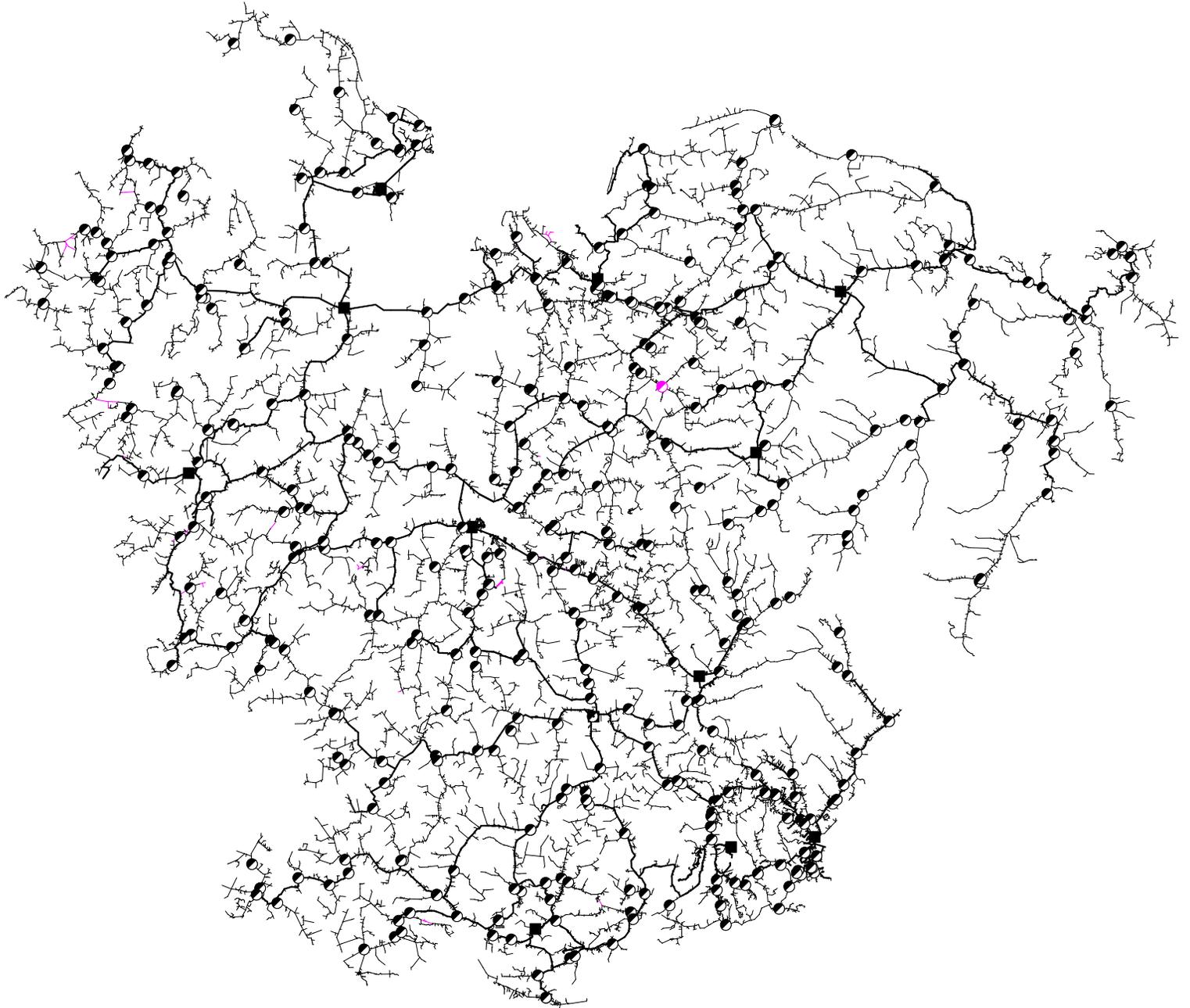
Fleming Mason Energy Existing Auto Transformer Locations



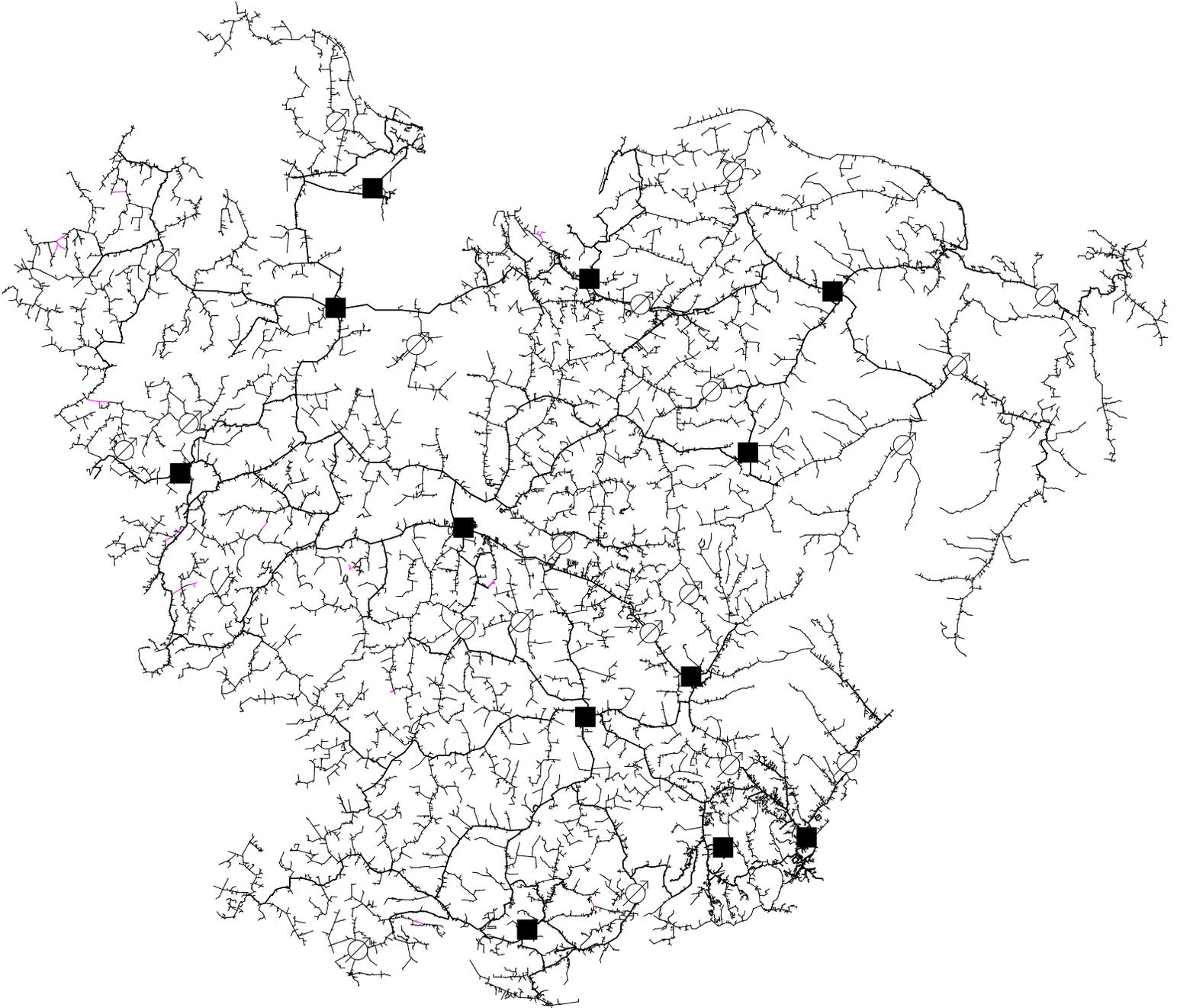
Fleming Mason Energy Existing Capacitor Locations



Fleming Mason Energy Existing Recloser Locations



Fleming Mason Energy Existing Regulator Locations





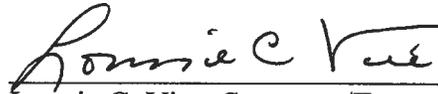
FLEMING-MASON ENERGY
COOPERATIVE, INC.

P.O. BOX 328 • FLEMINGSBURG, KENTUCKY 41041 • (606) 845-2661 • FAX (606) 845-1008

WHEREAS, A Construction Work Plan for 2011-2012 in the amount of \$ 6,928,506 has been prepared by Patterson & Dewar Engineering, Inc.

NOW, THEREFORE BE IT RESOLVED, that Fleming-Mason Energy's Board of Directors adopt the 2011-2012 Work Plan as a course of action, to be followed, or until amended with the approval of the Rural Utilities Service.

I, Lonnie C. Vice, Secretary-Treasurer of Fleming-Mason Energy Cooperative, Inc. do hereby certify that the above is a true and correct excerpt from the minutes of the meeting of the Board of Directors of Fleming-Mason Energy Cooperative, Inc. held on January 3, 2011.



Lonnie C. Vice, Secretary/Treasurer

Fleming-Mason Energy Cooperative

Anticipated Annual Additional Cost of Operation After Completion of all CWP Projects:

Estimated Depreciation:

Account No.	Balance 12/31/2010	Monthly Rate X12	Depreciation	Percent of Total	Estimated Capitalization	Estimated Depreciation
36200	\$0.00	0.00%	\$0.00	0.00%	\$0	\$0
36400	\$29,357,834.00	3.69%	\$1,083,304.07	41.91%	\$2,903,633	\$107,144
36500	\$21,227,529.00	3.29%	\$698,385.70	27.02%	\$1,871,917	\$61,586
36700	\$1,301,598.00	2.71%	\$35,273.31	1.36%	\$94,545	\$2,562
36800	\$15,768,045.00	3.03%	\$477,771.76	18.48%	\$1,280,595	\$38,802
36900	\$5,424,366.00	2.78%	\$150,797.37	5.83%	\$404,190	\$11,236
37000	\$2,629,430.00	3.70%	\$97,288.91	3.76%	\$260,768	\$9,648
37100	\$1,498,429.00	2.81%	\$42,105.85	1.63%	\$112,858	\$3,171
37300	\$0.00	0.00%	\$0.00	0.00%	\$0	\$0
39000	\$0.00	0.00%	\$0.00	0.00%	\$0	\$0
	\$77,207,231.00		\$2,584,926.99	100.00%	\$6,928,506	\$234,151

Estimated Property Taxes:

2010 Taxes	Property @ 12/31/2010	Average Rate	Work Plan Amount	Estimated Taxes
\$628,352	\$87,204,621	0.72%	\$6,928,506	\$49,923

Estimated Interest Expense:

Plant	Estimated Interest Rate	Estimated Interest Expense
\$6,928,506	4.00%	\$277,140

Estimated Operation and Maintenance Expense:

Plant	Estimated O&M %	Estimated O&M Expense
\$6,928,506	4.65%	\$322,176

Estimated cost of operation after the proposed facilities are completed:

\$883,390



**United States Department of Agriculture
Rural Development**

JAN 21 2011

Mr. Christopher Perry
President and CEO
Fleming-Mason Energy Cooperative, Inc.
P.O. Box 328
Flemingsburg, Kentucky 41041-0328

Dear Mr. Perry:

The USDA Rural Utilities Service (RUS) has reviewed the Environmental Report (ER) covering the facilities recommended in Fleming-Mason Energy Cooperative's 2011-2012 Construction Work Plan (CWP). In accordance with 7 CFR Part 1794, Environmental Policies and Procedures, as amended, all projects proposed in the CWP are Categorical Exclusions (§1794.21[b][7]&[15] and §1794.22[a][5]). No additional environmental information needs to be submitted for review, provided there are no extraordinary circumstances and the projects do not change from what has been described in the CWP/ER.

Fleming-Mason Energy Cooperative now has environmental approval for all projects in the CWP. Fleming-Mason Energy Cooperative is responsible for acquiring the necessary permits for construction and operation of the proposed projects and for ensuring that any environmental commitments made in the CWP/ER are fulfilled.

Thank you for your assistance and cooperation in helping us fulfill our environmental review requirements. If you have any questions, please contact me at (202) 720-1994 or Ms. Lauren McGee, Environmental Scientist, at lauren.mcgee@wdc.usda.gov or (202) 720-1482.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles M. Philpott".

CHARLES M. PHILPOTT
Chief, Engineering Branch
Northern Regional Division
USDA Rural Utilities Service

1400 Independence Ave, S.W. · Washington DC 20250-0700
Web: <http://www.rurdev.usda.gov>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights,
1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (Voice) or (202) 720-6382 (TDD).

Balanced Voltage Drop Report

Source: SHARKEY

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
 Title:
 Case:

05/21/2011 07:29 Page 1

		Units Displayed In Volts														-----Element-----				
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
SHARKEY		ABC	SHARKEY	15.12Y	126.0	0.00	0.00	372.38	0	16621	3009	98	0.00	0.0	0.000	0	0	0	0	1776
----- Feeder No. 0 (Sharkey) Beginning with Device OC80 -----																				
C CO2574	CO2575	ABC	2ACSR	15.00Y	125.0	0.47	1.03	192.96	107	8672	850	100	30.98	0.4	1.109	0	0	0	1	1088 C
C CO-1183335686	CO2574	ABC	2ACSR	14.99Y	124.9	0.09	1.12	192.88	107	8638	831	100	6.25	0.1	1.149	0	0	0	0	1086 C
C OH390216002	ST390216001	ABC	1/OACSR	7.37Y	122.9	0.05	3.10	221.19	96	4895	-32	-100	1.89	0.0	2.600	0	0	0	0	696 C
C CO3026	OH390216002	ABC	1/OACSR	7.37Y	122.8	0.12	3.21	220.26	96	4873	-36	-100	4.60	0.1	2.636	0	0	0	1	695 C
C CO3011	CO3026	ABC	1/OACSR	7.35Y	122.5	0.27	3.48	220.08	96	4864	-41	-100	10.70	0.2	2.719	0	0	0	4	694 C
C CO3693	CO3011	ABC	1/OACSR	7.34Y	122.4	0.12	3.60	219.58	95	4842	-53	-100	4.94	0.1	2.757	0	0	0	0	688 C
C CO3692	CO3693	ABC	1/OACSR	7.33Y	122.1	0.27	3.88	219.27	95	4831	-59	-100	10.98	0.2	2.843	0	0	0	2	688 C
C CO3691	CO3692	ABC	1/OACSR	7.32Y	122.0	0.13	4.01	218.67	95	4806	-71	-100	5.28	0.1	2.884	0	0	0	2	686 C
L CO4940	CO4943	C	4ACSR	7.02Y	117.0	0.17	9.01	81.50	58	566	86	99	0.78	0.1	7.393	0	0	0	0	79 L
L CO4941	CO4940	C	4ACSR	7.01Y	116.9	0.13	9.14	81.50	58	566	85	99	0.59	0.1	7.428	0	0	0	0	79 L
L CO4939	CO4941	C	4ACSR	6.99Y	116.5	0.34	9.48	81.50	58	565	85	99	1.56	0.3	7.523	0	0	0	3	79 L
L CO4937	CO4939	C	4ACSR	6.97Y	116.2	0.33	9.81	77.88	56	538	81	99	1.43	0.3	7.618	0	0	0	0	76 L
L CO4938	CO4937	C	4ACSR	6.96Y	116.0	0.17	9.98	77.88	56	537	80	99	0.75	0.1	7.667	0	0	0	2	76 L
L CO17306	CO4938	C	4ACSR	6.94Y	115.7	0.37	10.35	73.71	53	507	76	99	1.52	0.3	7.780	0	0	0	2	74 L
L CO4936	CO17306	C	4ACSR	6.93Y	115.5	0.14	10.49	73.04	52	501	74	99	0.57	0.1	7.823	0	0	0	1	72 L
L CO4935	CO4936	C	4ACSR	6.92Y	115.3	0.17	10.66	70.60	50	484	72	99	0.66	0.1	7.876	0	0	0	1	71 L
L CO4934	CO4935	C	4ACSR	6.90Y	115.0	0.37	11.02	69.54	50	476	71	99	1.43	0.3	7.995	0	0	0	1	70 L
L CO4933	CO4934	C	4ACSR	6.88Y	114.6	0.34	11.36	67.57	48	461	68	99	1.27	0.3	8.107	0	0	0	4	69 L
L CO4932	CO4933	C	4ACSR	6.87Y	114.5	0.17	11.53	63.50	45	432	64	99	0.60	0.1	8.167	0	0	0	3	65 L
L CO4931	CO4932	C	4ACSR	6.85Y	114.2	0.32	11.85	61.56	44	418	62	99	1.10	0.3	8.284	0	0	0	1	62 L
L CO4930	CO4931	C	4ACSR	6.84Y	114.0	0.12	11.97	60.28	43	409	60	99	0.41	0.1	8.329	0	0	0	0	61 L
L CO4928	CO4930	C	4ACSR	6.84Y	114.0	0.01	11.98	1.94	1	13	2	99	0.00	0.0	8.398	0	0	0	1	1 L
L CO4929	CO4930	C	4ACSR	6.84Y	114.0	0.00	11.97	0.43	0	3	0	100	0.00	0.0	8.389	0	0	0	2	2 L
L CO4745	CO4930	C	4ACSR	6.82Y	113.7	0.30	12.27	57.91	41	392	57	99	0.99	0.3	8.448	0	0	0	5	58 L
L CO4951	CO4745	C	4ACSR	6.82Y	113.7	0.01	12.28	4.90	4	33	4	99	0.00	0.0	8.495	0	0	0	1	2 L
L CO4952	CO4951	C	4ACSR	6.82Y	113.7	0.00	12.29	2.31	2	16	2	99	0.00	0.0	8.533	0	0	0	1	1 L
L CO4953	CO4745	C	4ACSR	6.82Y	113.7	0.06	12.33	13.60	10	92	12	99	0.04	0.0	8.542	0	0	0	5	12 L
L CO4954	CO4953	C	4ACSR	6.82Y	113.7	0.01	12.34	2.77	2	19	2	99	0.00	0.0	8.603	0	0	0	3	4 L
L CO4955	CO4954	C	4ACSR	6.82Y	113.7	0.00	12.34	1.01	1	7	1	99	0.00	0.0	8.684	0	0	0	1	1 L
L CO4777	CO4953	C	4ACSR	6.82Y	113.7	0.02	12.35	4.84	3	33	4	99	0.00	0.0	8.613	0	0	0	3	3 L
L CO4746	CO4745	C	4ACSR	6.81Y	113.5	0.19	12.46	35.42	25	239	37	99	0.36	0.2	8.565	0	0	0	3	39 L
L CO17305	CO4746	C	4ACSR	6.81Y	113.5	0.08	12.54	32.21	23	217	34	99	0.15	0.1	8.621	0	0	0	2	36 L
L CO4956	CO17305	C	4ACSR	6.80Y	113.3	0.15	12.69	30.13	22	203	32	99	0.25	0.1	8.731	0	0	0	2	34 L
L CO4959	CO4956	C	4ACSR	6.80Y	113.3	0.04	12.72	26.10	19	175	28	99	0.05	0.0	8.761	0	0	0	3	28 L
L CO4960	CO4959	C	4ACSR	6.79Y	113.2	0.11	12.84	22.70	16	152	25	99	0.14	0.1	8.873	0	0	0	2	25 L
L CO4961	CO4960	C	4ACSR	6.79Y	113.2	0.00	12.84	1.63	1	11	1	100	0.00	0.0	8.901	0	0	0	2	5 L
L CO4962	CO4961	C	4ACSR	6.79Y	113.2	0.00	12.84	1.22	1	8	1	99	0.00	0.0	8.920	0	0	0	0	3 L
L CO4963	CO4962	C	4ACSR	6.79Y	113.2	0.00	12.84	1.22	1	8	1	99	0.00	0.0	8.967	0	0	0	1	3 L
L CO4964	CO4963	C	4ACSR	6.79Y	113.2	0.00	12.84	0.00	0	0	0	100	0.00	0.0	9.103	0	0	0	1	1 L
L CO4965	CO4964	C	4ACSR	6.79Y	113.2	0.00	12.84	0.00	0	0	0	100	0.00	0.0	9.216	0	0	0	0	0 L
L CO4792	CO4963	C	4ACSR	6.79Y	113.2	0.00	12.84	0.00	0	0	0	100	0.00	0.0	9.015	0	0	0	1	1 L
L CO4751	CO4960	C	4ACSR	6.78Y	113.0	0.12	12.95	18.81	13	127	17	99	0.12	0.1	9.015	0	0	0	2	18 L
L CO4966	CO4751	C	4ACSR	6.78Y	113.0	0.07	13.02	13.68	10	92	12	99	0.05	0.1	9.124	0	0	0	3	14 L
L CO4967	CO4966	C	4ACSR	6.78Y	113.0	0.02	13.04	8.66	6	58	8	99	0.01	0.0	9.169	0	0	0	1	11 L
L CO4968	CO4967	C	4ACSR	6.78Y	112.9	0.02	13.05	8.01	6	54	7	99	0.01	0.0	9.216	0	0	0	2	9 L
L CO4969	CO4968	C	4ACSR	6.78Y	112.9	0.01	13.07	5.72	4	38	5	99	0.00	0.0	9.271	0	0	0	2	7 L
L CO4970	CO4969	C	4ACSR	6.78Y	112.9	0.01	13.08	2.67	2	18	2	99	0.00	0.0	9.335	0	0	0	1	5 L
L CO4975	CO4970	C	4ACSR	6.78Y	112.9	0.01	13.08	2.50	2	17	2	99	0.00	0.0	9.406	0	0	0	1	2 L
L CO4976	CO4975	C	4ACSR	6.78Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.441	0	0	0	0	1 L
L CO4971	CO4976	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.631	0	0	0	0	1 L
L CO4972	CO4971	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.749	0	0	0	0	1 L
L CO4973	CO4972	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.856	0	0	0	0	1 L
L CO4974	CO4973	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.903	0	0	0	0	1 L
L CO4977	CO4974	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	9.974	0	0	0	0	1 L
L CO4978	CO4977	C	4ACSR	6.77Y	112.9	0.00	13.08	0.05	0	0	0	100	0.00	0.0	10.033	0	0	0	1	1 L
L CO4789	CO4970	C	4ACSR	6.78Y	112.9	0.00	13.08	0.00	0	0	0	100	0.00	0.0	9.524	0	0	0	2	2 L
L CO4788	CO4967	C	4ACSR	6.78Y	113.0	0.00	13.04	0.00	0	0	0	100	0.00	0.0	9.205	0	0	0	1	1 L
L CO4787	CO4751	C	4ACSR	6.78Y	113.0	0.01	12.97	4.64	3	31	4	99	0.00	0.0	9.086	0	0	0	2	2 L
L CO4752	CO4956	C	4ACSR	6.80Y	113.3	0.03	12.71	2.40	2	16	2	99	0.00	0.0	8.967</					

Balanced Voltage Drop Report
Source: SHARKEY

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru	
L CO608863536	CO8305	B	2ACSR	6.97Y	116.2	0.01	9.79	18.14	10	125	17	99	0.01	0.0	10.011	0	0	0	24	L
L CO-1092664706	CO608863536	B	2ACSR	6.97Y	116.2	0.00	9.79	1.82	1	13	2	99	0.00	0.0	10.034	0	0	0	0	L
L CO1183017319	CO608863536	B	2ACSR	6.97Y	116.2	0.01	9.79	16.32	9	113	15	99	0.01	0.0	10.025	0	0	0	24	L
L CO8303	CO1183017319	B	4ACSR	6.97Y	116.2	0.00	9.79	0.00	0	0	0	100	0.00	0.0	10.195	0	0	0	1	L
L CO5208	CO1183017319	B	4ACSR	6.97Y	116.2	0.05	9.84	16.21	12	112	15	99	0.04	0.0	10.091	0	0	0	23	L
L CO5209	CO5208	B	4ACSR	6.97Y	116.1	0.06	9.90	16.21	12	112	15	99	0.06	0.1	10.180	0	0	0	23	L
L CO5210	CO5209	B	4ACSR	6.96Y	116.0	0.06	9.96	16.21	12	112	15	99	0.05	0.0	10.262	0	0	0	1	L
L CO5211	CO5210	B	4ACSR	6.96Y	115.9	0.11	10.08	16.19	12	112	15	99	0.10	0.1	10.420	0	0	0	22	L
L CO5099	CO5211	B	4ACSR	6.96Y	115.9	0.00	10.08	1.68	1	12	2	99	0.00	0.0	10.472	0	0	0	1	L
L CO5100	CO5211	B	4ACSR	6.96Y	115.9	0.00	10.08	0.95	1	7	1	99	0.00	0.0	10.457	0	0	0	4	L
L CO5205	CO5211	B	4ACSR	6.95Y	115.8	0.10	10.17	13.56	10	94	12	99	0.07	0.1	10.579	0	0	0	1	L
L CO5206	CO5205	B	4ACSR	6.94Y	115.7	0.09	10.26	12.04	9	83	11	99	0.06	0.1	10.752	0	0	0	1	L
L CO5108	CO5206	B	2ACSR	6.94Y	115.7	0.00	10.26	0.11	0	1	0	100	0.00	0.0	10.873	0	0	0	2	L
L CO5207	CO5206	B	4ACSR	6.94Y	115.6	0.10	10.36	11.75	8	81	11	99	0.07	0.1	10.943	0	0	0	1	L
L CO5097	CO5207	B	4ACSR	6.94Y	115.6	0.00	10.36	0.00	0	0	0	100	0.00	0.0	11.038	0	0	0	3	L
L CO5203	CO5207	B	4ACSR	6.94Y	115.6	0.05	10.42	11.34	8	78	10	99	0.03	0.0	11.050	0	0	0	1	L
L CO5204	CO5203	B	4ACSR	6.93Y	115.5	0.04	10.46	9.92	7	68	9	99	0.02	0.0	11.145	0	0	0	3	L
L CO5056	CO5204	B	4ACSR	6.93Y	115.5	0.08	10.53	7.21	5	50	6	99	0.03	0.1	11.382	0	0	0	0	L
L CO5098	CO5056	B	4ACSR	6.93Y	115.5	0.01	10.54	3.37	2	23	3	99	0.00	0.0	11.453	0	0	0	1	L
L CO5202	CO5056	B	4ACSR	6.93Y	115.4	0.02	10.55	3.83	3	26	3	99	0.00	0.0	11.512	0	0	0	2	L
L CO8272	CO5202	B	4ACSR	6.93Y	115.4	0.00	10.55	0.00	0	0	0	100	0.00	0.0	11.571	0	0	0	0	L
L CO1495488985	CO5202	B	1/OPRIURD	6.93Y	115.4	0.00	10.55	-0.02	0	0	0	100	0.00	0.0	11.546	0	0	0	0	L
L CO5096	CO5204	B	4ACSR	6.93Y	115.5	0.00	10.46	0.11	0	1	0	100	0.00	0.0	11.240	0	0	0	2	L
L CO4801	CO4807	B	4ACSR	6.98Y	116.3	0.00	9.67	1.61	1	11	1	100	0.00	0.0	9.899	0	0	0	2	L
L CO4810	CO4813	B	4ACSR	7.00Y	116.6	0.02	9.39	6.40	5	44	6	99	0.01	0.0	9.666	0	0	0	2	L
L CO4774	CO4810	B	4ACSR	7.00Y	116.6	0.00	9.40	0.89	1	6	1	99	0.00	0.0	9.760	0	0	0	1	L
L CO4796	CO4810	B	2ACSR	7.00Y	116.6	0.00	9.39	0.75	0	5	1	98	0.00	0.0	9.743	0	0	0	1	L
L CO4811	CO4810	B	4ACSR	7.00Y	116.6	0.02	9.41	2.80	2	19	3	99	0.00	0.0	9.831	0	0	0	2	L
L CO4814	CO4812	B	2ACSR	7.00Y	116.7	0.00	9.30	1.80	1	12	2	99	0.00	0.0	9.594	0	0	0	3	L
L CO4815	CO4814	B	2ACSR	7.00Y	116.7	0.00	9.30	1.80	1	12	2	99	0.00	0.0	9.607	0	0	0	3	L
P CO2846	UD390436001	B	1/OPRIURD	14.94Y	124.5	0.00	1.50	-0.02	0	0	0	100	0.00	0.0	3.211	0	0	0	0	P

----- Feeder No. 0 (801/Farmers) Beginning with Device OC81 -----

----- Feeder No. 0 (Family Dollar) Beginning with Device OC82 -----

P CO507530292	FSE431	C	1/OPRIURD	15.10Y	125.9	0.00	0.15	-0.01	0	0	0	100	0.00	0.0	0.537	0	0	0	0	P
P CO2824	CO2826	ABC	700 MCM Hd	15.12Y	126.0	0.00	0.00	0.88	0	14	37	35	0.00	0.0	0.022	0	0	0	0	P

----- Feeder No. 0 (Ind. Park) Beginning with Device OC83 -----

P CO2416	OC83	ABC	500PRIURD	15.12Y	126.0	0.00	0.00	0.88	0	14	37	35	0.00	0.0	0.143	0	0	0	0	P
P CO2418	CO2416	ABC	500PRIURD	15.12Y	126.0	0.00	0.00	1.15	0	14	50	27	0.00	0.0	0.316	0	0	0	0	P
P CO-2129126233	FSE434	A	1/OPRIURD	15.12Y	126.0	0.00	0.01	7.32	5	14	110	13	0.00	0.0	0.356	0	0	0	0	P
P CO1602330975	CO-2129126233	A	1/OPRIURD	15.12Y	126.0	0.00	0.01	7.38	5	14	111	13	0.00	0.0	0.407	0	0	0	1	P
P UD390437001	CO1602330975	A	1/OPRIURD	15.12Y	126.0	0.00	0.01	7.36	5	12	111	11	0.00	0.0	0.419	0	0	0	0	P
P UD390437003	UD390437001	A	1/OPRIURD	15.12Y	126.0	0.00	0.01	7.37	5	12	111	11	0.00	0.0	0.422	0	0	0	0	P

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

KW	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total	Voltage Data		
15896	268	0	0	0	0	0	456	0.00	16621	Lowest Voltage = 112.92	on Element CO4978		
3415	81	-896	-452	0	0	0	861		3009	Max Accm VoltD = 13.08	on Element CO4978		
										Max Elem VoltD = 8.60	on Element RG390207001		

Balanced Voltage Drop Report
 Source: PLUMMERS LANDIN

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
 Title:
 Case:

Units Displayed In Volts																						
-Base Voltage:120.0-																						
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru		
PLUMMERS LANDIN		ABC	PLUMMERS L	7.56Y	126.0	0.00	0.00	423.14	0	9587	428	100	0.00	0.0	0.000	0	0	0	0	1891		
----- Feeder No. 0 (Muses Mill) Beginning with Device OC448187580 -----																						
L	CO6219	CO6218	A	2ACSR	7.02Y	116.9	0.26	9.08	71.38	40	502	-11	-100	1.15	0.2	4.527	0	0	0	140	L	
L	CO6220	CO6219	A	2ACSR	7.01Y	116.9	0.02	9.09	71.38	40	501	-12	-100	0.08	0.0	4.537	0	0	0	1	140	L
L	CO6221	CO6220	A	2ACSR	6.99Y	116.5	0.43	9.52	70.97	39	498	-12	-100	1.85	0.4	4.761	0	0	0	0	139	L
L	CO6113	CO6221	A	2ACSR	6.98Y	116.3	0.19	9.71	70.97	39	496	-14	-100	0.82	0.2	4.860	0	0	0	1	137	L
L	CO6112	CO6113	A	2ACSR	6.95Y	115.9	0.43	10.13	70.18	39	489	-14	-100	1.84	0.4	5.087	0	0	0	0	134	L
L	CO6140	CO6112	A	2ACSR	6.95Y	115.9	0.00	10.13	0.00	0	0	0	100	0.00	0.0	5.267	0	0	0	1	1	L
L	CO6274	CO6112	A	2ACSR	6.94Y	115.7	0.15	10.29	70.18	39	488	-15	-100	0.66	0.1	5.169	0	0	0	2	133	L
L	CO6275	CO6274	A	2ACSR	6.93Y	115.6	0.14	10.43	70.18	39	487	-16	-100	0.62	0.1	5.245	0	0	0	1	131	L
L	CO6276	CO6275	A	2ACSR	6.92Y	115.4	0.20	10.63	70.17	39	486	-17	-100	0.87	0.2	5.352	0	0	0	1	130	L
L	CO6111	CO6276	A	2ACSR	6.91Y	115.2	0.21	10.84	69.21	38	479	-17	-100	0.89	0.2	5.466	0	0	0	0	127	L
L	CO6228	CO6111	A	2ACSR	6.91Y	115.2	0.01	10.84	3.30	2	23	-1	-100	0.00	0.0	5.529	0	0	0	0	7	L
L	CO6229	CO6228	A	2ACSR	6.91Y	115.1	0.01	10.85	3.30	2	23	-1	-100	0.00	0.0	5.624	0	0	0	2	7	L
L	CO6146	CO6229	A	2ACSR	6.91Y	115.1	0.00	10.85	0.00	0	0	0	100	0.00	0.0	5.662	0	0	0	1	1	L
L	CO6332	CO6229	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	5.631	0	0	0	0	4	L
L	OC182	CO6332	A	15 H OCR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	5.631	0	0	0	0	4	L
L	CO6333	OC182	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	5.725	0	0	0	0	4	L
L	CO6230	CO6333	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	5.774	0	0	0	0	4	L
L	CO6231	CO6230	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	5.935	0	0	0	2	4	L
L	CO6232	CO6231	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	6.000	0	0	0	0	2	L
L	CO6145	CO6232	A	2ACSR	6.91Y	115.1	0.00	10.85	0.00	0	0	0	100	0.00	0.0	6.057	0	0	0	1	1	L
L	CO6233	CO6232	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	6.076	0	0	0	0	1	L
L	CO6234	CO6233	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	6.133	0	0	0	0	1	L
L	CO6235	CO6234	A	2ACSR	6.91Y	115.1	0.00	10.85	0.04	0	0	0	100	0.00	0.0	6.303	0	0	0	1	1	L
L	CO6226	CO6276	A	2ACSR	6.92Y	115.4	0.00	10.63	0.96	1	7	0	100	0.00	0.0	5.466	0	0	0	1	2	L
L	CO6227	CO6226	A	2ACSR	6.92Y	115.4	0.00	10.63	0.96	1	7	0	100	0.00	0.0	5.580	0	0	0	0	1	L
L	CO6225	CO6227	A	2ACSR	6.92Y	115.4	0.00	10.64	0.96	1	7	0	100	0.00	0.0	5.750	0	0	0	1	1	L
L	CO6139	CO6113	A	2ACSR	6.98Y	116.3	0.00	9.71	0.79	0	6	0	100	0.00	0.0	4.983	0	0	0	2	2	L
L	CO6223	CO6221	A	2ACSR	6.99Y	116.5	0.00	9.52	0.00	0	0	0	100	0.00	0.0	4.817	0	0	0	1	2	L
L	CO6224	CO6223	A	2ACSR	6.99Y	116.5	0.00	9.52	0.00	0	0	0	100	0.00	0.0	4.912	0	0	0	0	1	L
L	CO6222	CO6224	A	2ACSR	6.99Y	116.5	0.00	9.52	0.00	0	0	0	100	0.00	0.0	4.950	0	0	0	1	1	L

----- Feeder No. 0 (Bluebank) Beginning with Device OC-1800607339 -----																							
C	CO-1952292198	CO1769567024	ABC	2ACSR	7.56Y	126.0	0.04	0.04	216.03	120	4826	845	99	1.47	0.0	0.010	0	0	0	0	806	C	
C	CO-1291772028	CO-1952292198	ABC	2ACSR	7.55Y	125.8	0.12	0.16	216.03	120	4825	844	99	4.12	0.1	0.031	0	0	0	0	0	806	C
C	CO2080275668	CO-1291772028	ABC	2ACSR	7.53Y	125.5	0.32	0.48	216.03	120	4820	841	99	11.54	0.2	0.089	0	0	0	0	0	806	C
C	CO1062602769	CO2080275668	ABC	2ACSR	7.51Y	125.2	0.32	0.81	216.03	120	4809	834	99	11.56	0.2	0.148	0	0	0	0	0	806	C
C	CO28398208	CO1062602769	ABC	2ACSR	7.51Y	125.1	0.06	0.86	216.03	120	4797	827	99	2.01	0.0	0.158	0	0	0	0	0	806	C
C	CO-774506312	CO1612322580	ABC	2ACSR	7.49Y	124.9	0.22	1.14	216.03	120	4794	822	99	7.68	0.2	0.241	0	0	0	0	0	806	C
P	UD270772002	UD270772001	B	1/OPRIURD	7.26Y	120.9	0.00	5.06	-0.02	0	0	0	100	0.00	0.0	8.569	0	0	0	0	0	0	P

----- Feeder No. 0 (Hillsboro) Beginning with Device OC1078882550 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total			
KW	9052	134	0	0	0	0	402		0.00	9587	Lowest Voltage = 115.15 on Element CO6235		
KVAR	511	6	-651	-6	0	0	567			428	Max Accm VoltD = 10.85 on Element CO6235		
											Max Elem VoltD = 10.84 on Element RG330216001		

Balanced Voltage Drop Report
 Source: CHARTERS SUB

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
 Title:
 Case:

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Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Units Displayed In Volts						mi From Src	-----Element-----			Cons On	Cons Thru		
							Accum Drop	Thru Amps	% Cap	Thru KW	% KVAR	% PF		kW Loss	% Loss	Length (mi)			KW	KVAR
CHARTERS SUB	ABC	CHARTERS S	15.12Y	126.0	0.00	0.00	408.73	0	18100	4013	98	0.00	0.0	0.000	0	0	0	0	4207	
----- Feeder No. 0 (Salt Lick) Beginning with Device OC618 -----																				
----- Feeder No. 0 (Vanceburg) Beginning with Device OC617 -----																				
----- Feeder No. 0 (Holly) Beginning with Device OC619 -----																				
L CO23751	CO19894	B	6ACWC	7.02Y	116.9	0.09	9.07	37.76	27	257	65	97	0.19	0.1	12.303	0	0	0	6	71 L
L CO20151	CO23751	B	6ACWC	7.00Y	116.7	0.21	9.28	36.43	26	248	63	97	0.42	0.2	12.433	0	0	0	2	65 L
L CO20153	CO20151	B	6ACWC	7.00Y	116.7	0.05	9.33	32.60	23	221	56	97	0.08	0.0	12.464	0	0	0	1	63 L
L CO20152	CO20153	B	6ACWC	6.99Y	116.5	0.19	9.51	32.60	23	221	56	97	0.33	0.1	12.590	0	0	0	1	62 L
L CO20148	CO20152	B	6ACWC	6.98Y	116.4	0.07	9.59	31.74	23	215	54	97	0.12	0.1	12.640	0	0	0	2	61 L
L CO20150	CO20148	B	6ACWC	6.97Y	116.2	0.21	9.79	31.38	22	213	54	97	0.35	0.2	12.784	0	0	0	0	59 L
L CO20149	CO20150	B	6ACWC	6.97Y	116.1	0.09	9.89	31.38	22	212	54	97	0.16	0.1	12.850	0	0	0	0	59 L
L CO20154	CO20149	B	6ACWC	6.96Y	116.0	0.11	10.00	31.38	22	212	53	97	0.19	0.1	12.929	0	0	0	0	59 L
L CO20155	CO20154	B	6ACWC	6.96Y	115.9	0.06	10.06	31.38	22	212	53	97	0.11	0.1	12.973	0	0	0	0	59 L
L CO20127	CO20155	B	4ACSR	6.96Y	115.9	0.00	10.07	0.92	1	6	2	95	0.00	0.0	13.035	0	0	0	1	1 L
L CO20178	CO20155	B	6ACWC	6.95Y	115.8	0.14	10.21	30.47	22	206	52	97	0.24	0.1	13.077	0	0	0	0	58 L
L CO20179	CO20178	B	6ACWC	6.94Y	115.7	0.11	10.31	29.98	21	202	51	97	0.17	0.1	13.155	0	0	0	5	58 L
L CO20180	CO20179	B	6ACWC	6.94Y	115.6	0.07	10.39	29.60	21	199	50	97	0.11	0.1	13.208	0	0	0	1	51 L
L CO20181	CO20180	B	6ACWC	6.93Y	115.5	0.08	10.46	29.60	21	199	50	97	0.12	0.1	13.265	0	0	0	1	50 L
L CO20217	CO20181	B	4ACSR	6.93Y	115.5	0.00	10.46	0.14	0	1	0	100	0.00	0.0	13.299	0	0	0	0	2 L
L CO20216	CO20217	B	4ACSR	6.93Y	115.5	0.00	10.46	0.14	0	1	0	100	0.00	0.0	13.331	0	0	0	2	2 L
L CO20226	CO20181	B	6ACWC	6.93Y	115.5	0.01	10.47	29.46	21	198	50	97	0.01	0.0	13.271	0	0	0	0	47 L
L OC609	CO20226	B	35 H OCR	6.93Y	115.5	0.00	10.47	29.46	84	198	50	97	0.00	0.0	13.271	0	0	0	0	47 L
L CO20225	OC609	B	6ACWC	6.92Y	115.4	0.12	10.59	29.46	21	198	50	97	0.19	0.1	13.360	0	0	0	0	47 L
L CO20177	CO20225	B	6ACWC	6.92Y	115.4	0.02	10.60	29.46	21	198	50	97	0.03	0.0	13.372	0	0	0	3	47 L
L CO20203	CO20177	B	4ACSR	6.92Y	115.4	0.00	10.61	1.76	1	12	3	97	0.00	0.0	13.428	0	0	0	1	3 L
L CO20202	CO20203	B	4ACSR	6.92Y	115.4	0.00	10.61	1.47	1	10	2	98	0.00	0.0	13.476	0	0	0	2	2 L
L CO20113	CO20177	B	6ACWC	6.92Y	115.4	0.00	10.61	0.38	0	3	0	100	0.00	0.0	13.562	0	0	0	0	2 L
L CO20167	CO20113	B	6ACWC	6.92Y	115.4	0.00	10.61	0.38	0	3	0	100	0.00	0.0	13.638	0	0	0	0	2 L
L CO20156	CO20167	B	6ACWC	6.92Y	115.4	0.00	10.61	0.38	0	3	0	100	0.00	0.0	13.676	0	0	0	0	2 L
L CO20166	CO20156	B	6ACWC	6.92Y	115.4	0.00	10.61	0.38	0	3	0	100	0.00	0.0	13.829	0	0	0	0	2 L
L CO20165	CO20166	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	13.893	0	0	0	0	1 L
L CO20159	CO20165	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	13.990	0	0	0	0	1 L
L CO20157	CO20159	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.041	0	0	0	0	1 L
L CO20158	CO20157	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.064	0	0	0	0	1 L
L CO20161	CO20158	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.091	0	0	0	0	1 L
L CO20160	CO20161	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.140	0	0	0	0	1 L
L CO20164	CO20160	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.196	0	0	0	0	1 L
L CO20162	CO20164	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.329	0	0	0	0	1 L
L CO20163	CO20162	B	6ACWC	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.395	0	0	0	0	1 L
L CO20121	CO20163	B	4ACSR	6.92Y	115.4	0.00	10.61	0.00	0	0	0	100	0.00	0.0	14.433	0	0	0	0	0 L
L CO20122	CO20163	B	4ACSR	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.459	0	0	0	0	1 L
L CO-206101063	CO20122	B	2ACSR	6.92Y	115.4	0.00	10.61	0.01	0	0	0	100	0.00	0.0	14.656	0	0	0	1	1 L
L CO20219	CO20166	B	4ACSR	6.92Y	115.4	0.00	10.61	0.37	0	3	0	100	0.00	0.0	13.886	0	0	0	0	1 L
L CO20218	CO20219	B	4ACSR	6.92Y	115.4	0.00	10.61	0.37	0	3	0	100	0.00	0.0	13.975	0	0	0	1	1 L
L UP220659001	CO20218	B	1/OPRIURD	6.92Y	115.4	0.00	10.62	0.36	0	2	0	100	0.00	0.0	14.095	0	0	0	0	0 L
L CO20114	CO20177	B	6ACWC	6.92Y	115.3	0.06	10.66	22.35	16	150	38	97	0.07	0.0	13.431	0	0	0	0	37 L
L CO20204	CO20114	B	4ACSR	6.92Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	13.507	0	0	0	1	1 L
L CO20205	CO20114	B	4ACSR	6.92Y	115.3	0.00	10.67	0.95	1	6	2	95	0.00	0.0	13.455	0	0	0	2	2 L
L CO20110	CO20114	B	6ACWC	6.92Y	115.3	0.03	10.70	21.40	15	144	36	97	0.04	0.0	13.463	0	0	0	0	34 L
L CO20223	CO20110	B	4ACSR	6.92Y	115.3	0.00	10.70	0.52	0	3	1	95	0.00	0.0	13.508	0	0	0	0	2 L
L CO20206	CO20223	B	4ACSR	6.92Y	115.3	0.00	10.70	0.52	0	3	1	95	0.00	0.0	13.539	0	0	0	1	1 L
L CO20126	CO20223	B	2ACSR	6.92Y	115.3	0.00	10.70	0.00	0	0	0	100	0.00	0.0	13.524	0	0	0	1	1 L
L CO30536	CO20110	B	6ACWC	6.92Y	115.3	0.03	10.73	20.88	15	140	35	97	0.04	0.0	13.498	0	0	0	0	32 L
L CO30537	CO30536	B	6ACWC	6.91Y	115.2	0.08	10.80	20.88	15	140	35	97	0.08	0.1	13.577	0	0	0	0	32 L
L CO19518	CO30537	B	6ACWC	6.90Y	115.1	0.12	10.92	20.88	15	140	35	97	0.13	0.1	13.702	0	0	0	2	32 L
L CO19513	CO19518	B	6ACWC	6.90Y	115.0	0.09	11.01	20.82	15	139	35	97	0.10	0.1	13.797	0	0	0	2	30 L
L CO19517	CO19513	B	6ACWC	6.90Y	114.9	0.05	11.07	19.73	14	132	33	97	0.06	0.0	13.858	0	0	0	0	28 L
L CO19515	CO19517	B	6ACWC	6.90Y	114.9	0.01	11.08	19.73	14	132	33	97	0.01	0.0	13.870	0	0	0	3	28 L
L CO19514	CO19515	B	6ACWC	6.89Y	114.8	0.09	11.17	19.67	14	131	33	97	0.10	0.1	13.971	0	0	0	0	25 L
L CO19516	CO19514	B	6ACWC	6.89Y	114.8	0.01	11.18	19.67	14	131	33	97	0.02	0.0	13.987	0	0	0	1	25 L
L CO19519	CO19516	B	6ACWC	6.89Y	114.8	0.06	11.25	17.26	12	115	29	97	0.06	0.0	14.066	0	0	0	2	23 L
L CO19531	CO19519	B	6ACWC	6.88Y	114.7	0.07	11.31	15.65	11	104	26	97	0.06	0.1	14.161	0	0	0	1	21 L
L CO19521	CO19531</																			

Balanced Voltage Drop Report
Source: CHARTERS SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L CO23752	CO19527	B	6ACWC	6.86Y	114.3	0.01	11.71	1.70	1	11	3	96	0.00	0.0	15.130	0	0	0	2	5	L
L CO19203	CO23752	B	6ACWC	6.86Y	114.3	0.00	11.71	0.76	1	5	1	98	0.00	0.0	15.165	0	0	0	1	3	L
L CO19189	CO19203	B	4ACSR	6.86Y	114.3	0.00	11.71	0.76	1	5	1	98	0.00	0.0	15.222	0	0	0	1	2	L
L CO19190	CO19189	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.297	0	0	0	0	1	L
L CO19191	CO19190	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.364	0	0	0	0	1	L
L CO19192	CO19191	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.430	0	0	0	0	1	L
L CO19193	CO19192	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.515	0	0	0	0	1	L
L CO19194	CO19193	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.591	0	0	0	0	1	L
L CO19195	CO19194	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.671	0	0	0	0	1	L
L CO19196	CO19195	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.842	0	0	0	0	1	L
L CO19197	CO19196	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	15.927	0	0	0	0	1	L
L CO19198	CO19197	B	4ACSR	6.86Y	114.3	0.00	11.71	0.06	0	0	0	100	0.00	0.0	16.135	0	0	0	1	1	L
L CO1908038875	CO19203	B	2ACSR	6.86Y	114.3	0.00	11.71	0.00	0	0	0	100	0.00	0.0	15.332	0	0	0	0	0	L
L CO19600	CO19516	B	4ACSR	6.89Y	114.8	0.00	11.18	0.08	0	1	0	100	0.00	0.0	14.044	0	0	0	0	1	L
L CO19599	CO19600	B	4ACSR	6.89Y	114.8	0.00	11.18	0.08	0	1	0	100	0.00	0.0	14.139	0	0	0	1	1	L
L CO20129	CO20177	B	4ACSR	6.92Y	115.4	0.02	10.63	3.60	3	24	6	97	0.00	0.0	13.513	0	0	0	2	2	L
L CO20128	CO20179	B	4ACSR	6.94Y	115.7	0.00	10.32	0.38	0	3	1	95	0.00	0.0	13.288	0	0	0	2	2	L
L CO30545	CO17775	B	4ACSR	7.02Y	117.0	0.08	9.05	25.96	19	177	45	97	0.11	0.1	12.160	0	0	0	2	66	L
L CO23827	CO30545	B	4ACSR	7.01Y	116.9	0.09	9.14	23.67	17	161	41	97	0.11	0.1	12.243	0	0	0	2	64	L
L CO17898	CO23827	B	4ACSR	7.00Y	116.7	0.14	9.28	20.65	15	140	35	97	0.16	0.1	12.392	0	0	0	1	62	L
L CO17861	CO17898	B	2ACSR	7.00Y	116.7	0.00	9.28	0.00	0	0	0	100	0.00	0.0	12.445	0	0	0	1	1	L
L CO17900	CO17898	B	4ACSR	7.00Y	116.7	0.03	9.31	18.78	13	128	32	97	0.03	0.0	12.431	0	0	0	1	60	L
L CO17899	CO17900	B	4ACSR	7.00Y	116.6	0.08	9.39	17.12	12	116	29	97	0.07	0.1	12.534	0	0	0	2	59	L
L CO17906	CO17899	B	4ACSR	7.00Y	116.6	0.02	9.42	15.01	11	102	26	97	0.02	0.0	12.567	0	0	0	1	38	L
L CO17905	CO17906	B	4ACSR	6.99Y	116.5	0.04	9.46	14.14	10	96	24	97	0.03	0.0	12.629	0	0	0	3	37	L
L CO17907	CO17905	B	4ACSR	6.99Y	116.5	0.04	9.50	11.85	8	80	20	97	0.03	0.0	12.705	0	0	0	1	31	L
L CO17908	CO17907	B	4ACSR	6.99Y	116.5	0.03	9.53	11.81	8	80	20	97	0.02	0.0	12.766	0	0	0	0	30	L
L CO17909	CO17908	B	4ACSR	6.99Y	116.4	0.03	9.56	11.79	8	80	20	97	0.02	0.0	12.818	0	0	0	0	29	L
L CO17854	CO17909	B	4ACSR	6.99Y	116.4	0.00	9.56	0.48	0	3	1	95	0.00	0.0	12.894	0	0	0	1	1	L
L CO17840	CO17909	B	4ACSR	6.98Y	116.4	0.03	9.59	11.31	8	77	19	97	0.02	0.0	12.884	0	0	0	0	28	L
L OH280325002	CO17840	B	4ACSR	6.98Y	116.4	0.00	9.59	0.00	0	0	0	100	0.00	0.0	12.948	0	0	0	0	0	L
L CO17841	CO17840	B	4ACSR	6.98Y	116.4	0.04	9.63	11.31	8	77	19	97	0.02	0.0	12.956	0	0	0	1	28	L
L CO17915	CO17841	B	4ACSR	6.98Y	116.3	0.02	9.65	3.48	2	24	6	97	0.00	0.0	13.108	0	0	0	1	9	L
L CO17911	CO17915	B	4ACSR	6.98Y	116.3	0.01	9.66	3.41	2	23	6	97	0.00	0.0	13.165	0	0	0	2	8	L
L CO17913	CO17911	B	4ACSR	6.98Y	116.3	0.01	9.67	2.34	2	16	4	97	0.00	0.0	13.227	0	0	0	2	6	L
L CO17914	CO17913	B	4ACSR	6.98Y	116.3	0.01	9.68	2.27	2	15	4	97	0.00	0.0	13.328	0	0	0	1	4	L
L CO17912	CO17914	B	4ACSR	6.98Y	116.3	0.00	9.68	1.06	1	7	2	96	0.00	0.0	13.392	0	0	0	0	3	L
L CO17917	CO17912	B	4ACSR	6.98Y	116.3	0.01	9.70	1.06	1	7	2	96	0.00	0.0	13.628	0	0	0	1	3	L
L CO17916	CO17917	B	4ACSR	6.98Y	116.3	0.00	9.70	1.05	1	7	2	96	0.00	0.0	13.638	0	0	0	0	2	L
L CO17910	CO17916	B	4ACSR	6.98Y	116.3	0.01	9.71	1.05	1	7	2	96	0.00	0.0	13.827	0	0	0	0	2	L
L CO17918	CO17910	B	4ACSR	6.98Y	116.3	0.01	9.71	1.05	1	7	2	96	0.00	0.0	14.017	0	0	0	0	2	L
L CO17921	CO17918	B	4ACSR	6.98Y	116.3	0.00	9.72	0.92	1	6	2	95	0.00	0.0	14.130	0	0	0	0	1	L
L CO17920	CO17921	B	4ACSR	6.98Y	116.3	0.01	9.73	0.92	1	6	2	95	0.00	0.0	14.320	0	0	0	0	1	L
L CO17922	CO17920	B	4ACSR	6.98Y	116.3	0.01	9.74	0.92	1	6	2	95	0.00	0.0	14.585	0	0	0	0	1	L
L CO17919	CO17922	B	4ACSR	6.98Y	116.3	0.01	9.75	0.92	1	6	2	95	0.00	0.0	14.755	0	0	0	0	1	L
L CO18066	CO17919	B	4ACSR	6.98Y	116.3	0.00	9.75	0.92	1	6	2	95	0.00	0.0	14.831	0	0	0	0	1	L
L CO18067	CO18066	B	4ACSR	6.97Y	116.2	0.00	9.75	0.92	1	6	2	95	0.00	0.0	14.907	0	0	0	0	1	L
L CO18100	CO18067	B	4ACSR	6.97Y	116.2	0.01	9.76	0.92	1	6	2	95	0.00	0.0	15.134	0	0	0	0	1	L
L CO18068	CO18100	B	4ACSR	6.97Y	116.2	0.00	9.77	0.92	1	6	2	95	0.00	0.0	15.229	0	0	0	0	1	L
L CO18069	CO18068	B	4ACSR	6.97Y	116.2	0.01	9.77	0.92	1	6	2	95	0.00	0.0	15.361	0	0	0	0	1	L
L CO18070	CO18069	B	4ACSR	6.97Y	116.2	0.00	9.77	0.92	1	6	2	95	0.00	0.0	15.418	0	0	0	0	1	L
L CO18071	CO18070	B	4ACSR	6.97Y	116.2	0.00	9.78	0.92	1	6	2	95	0.00	0.0	15.494	0	0	0	0	1	L
L CO18072	CO18071	B	4ACSR	6.97Y	116.2	0.00	9.78	0.92	1	6	2	95	0.00	0.0	15.550	0	0	0	0	1	L
L CO18073	CO18072	B	4ACSR	6.97Y	116.2	0.00	9.78	0.92	1	6	2	95	0.00	0.0	15.645	0	0	0	1	1	L
L CO17855	CO17918	B	4ACSR	6.98Y	116.3	0.00	9.72	0.13	0	1	0	100	0.00	0.0	14.131	0	0	0	1	1	L
L CO17925	CO17841	B	4ACSR	6.98Y	116.3	0.06	9.69	7.61	5	51	13	97	0.02	0.0	13.122	0	0	0	0	18	L
L CO17924	CO17925	B	4ACSR	6.98Y	116.3	0.01	9.70	7.44	5	50	13	97	0.00	0.0	13.144	0	0	0	0	17	L
L CO17923	CO17924	B	4ACSR	6.97Y	116.2	0.12	9.81	7.44	5	50	13	97	0.05	0.1	13.481	0	0	0	0	17	L
L CO17856	CO17923	B	4ACSR	6.97Y	116.2	0.00	9.81	0.50	0	3	1	95	0.00	0.0	13.614	0	0	0	2	2	L
L CO17842	CO17923	B	4ACSR	6.97Y	116.2	0.03	9.84	6.94	5	47	12	97	0.01	0.0	13.562	0	0	0	0	15	L
L CO17843	CO17842	B	4ACSR	6.97Y	116.1	0.02	9.86	5.07	4	34	9	97	0.01	0.0	13.644	0	0	0	0	13	L
L CO17858	CO17843	B	4ACSR	6.97Y	116.1	0.00	9.86	0.39	0	3	1	95	0.00	0.0	13.777	0	0	0	3	3	L
L CO17844	CO17843	B	4ACSR	6.97Y	116.1	0.03	9.89	4.68	3	32	8	97	0.01	0.0	13.801	0	0	0	0	10	L
L CO17845	CO17844	B	4ACSR	6.97Y	116.1	0.01	9.90	2.30	2	16	4	97	0.00	0.0	13.893	0	0	0	0	9	L
L CO17928	CO17845	B	4ACSR	6.97Y	116.1	0.00	9.90	0.54	0	4	1	97	0.00	0.0	14.083	0	0	0	0	4	L
L CO17926	CO17928	B	4ACSR	6.97Y	116.1	0.00	9.91	0.54	0	4	1	97	0.00	0.0	14.182	0	0	0	1	4	L
L CO17927	CO17926	B	4ACSR	6.97Y	116.1	0.00	9.91	0.52	0	3	1	95	0.00	0.0	14.253	0	0	0	1	3	L
L																					

Balanced Voltage Drop Report
Source: CHARTERS SUB

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L CO17940	CO17939	B	4ACSR	6.99Y	116.5	0.00	9.46	0.71	1	5	1	98	0.00	0.0	12.763	0	0	0	1	1	L
L CO17947	CO17899	B	4ACSR	7.00Y	116.6	0.00	9.39	1.64	1	11	3	96	0.00	0.0	12.541	0	0	0	0	19	L
L OC541	CO17947	B	25 H OCR	7.00Y	116.6	0.00	9.39	1.64	7	11	3	96	0.00	0.0	12.541	0	0	0	0	19	L
L CO17948	OC541	B	4ACSR	6.99Y	116.6	0.03	9.42	1.64	1	11	3	96	0.00	0.0	12.894	0	0	0	0	19	L
L CO17901	CO17948	B	4ACSR	6.99Y	116.6	0.02	9.44	1.64	1	11	3	96	0.00	0.0	13.111	0	0	0	1	19	L
L CO17902	CO17901	B	4ACSR	6.99Y	116.6	0.00	9.44	1.64	1	11	3	96	0.00	0.0	13.153	0	0	0	1	16	L
L CO17903	CO17902	B	4ACSR	6.99Y	116.6	0.01	9.45	1.56	1	11	3	96	0.00	0.0	13.263	0	0	0	1	15	L
L CO23825	CO17903	B	4ACSR	6.99Y	116.5	0.00	9.45	1.14	1	8	2	97	0.00	0.0	13.338	0	0	0	1	14	L
L CO18093	CO23825	B	4ACSR	6.99Y	116.5	0.00	9.45	0.68	0	5	1	98	0.00	0.0	13.404	0	0	0	0	13	L
L OH280115001	CO18093	B	4ACSR	6.99Y	116.5	0.00	9.46	0.68	0	5	1	98	0.00	0.0	13.543	0	0	0	0	13	L
L CO18047	OH280115001	B	4ACSR	6.99Y	116.5	0.00	9.46	0.00	0	0	0	100	0.00	0.0	13.617	0	0	0	1	1	L
L CO18042	OH280115001	B	4ACSR	6.99Y	116.5	0.00	9.46	0.68	0	5	1	98	0.00	0.0	13.602	0	0	0	0	12	L
L OH280114002	CO18042	B	4ACSR	6.99Y	116.5	0.01	9.47	0.68	0	5	1	98	0.00	0.0	13.836	0	0	0	0	12	L
L CO18043	OH280114002	B	4ACSR	6.99Y	116.5	0.00	9.47	0.68	0	5	1	98	0.00	0.0	13.922	0	0	0	0	12	L
L CO18049	CO18043	B	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	13.976	0	0	0	1	1	L
L CO30548	CO18043	B	4ACSR	6.99Y	116.5	0.00	9.47	0.68	0	5	1	98	0.00	0.0	14.055	0	0	0	1	11	L
L CO18065	CO30548	B	4ACSR	6.99Y	116.5	0.01	9.48	0.68	0	5	1	98	0.00	0.0	14.411	0	0	0	0	10	L
L CO18094	CO18065	B	4ACSR	6.99Y	116.5	0.00	9.49	0.68	0	5	1	98	0.00	0.0	14.462	0	0	0	1	9	L
L CO18095	CO18094	B	4ACSR	6.99Y	116.5	0.01	9.49	0.68	0	5	1	98	0.00	0.0	14.699	0	0	0	3	8	L
L CO18096	CO18095	B	4ACSR	6.99Y	116.5	0.00	9.49	0.03	0	0	0	100	0.00	0.0	14.790	0	0	0	3	5	L
L CO18097	CO18096	B	4ACSR	6.99Y	116.5	0.00	9.49	0.02	0	0	0	100	0.00	0.0	14.932	0	0	0	2	2	L
L OH280114001	CO18097	B	4ACSR	6.99Y	116.5	0.00	9.49	0.00	0	0	0	100	0.00	0.0	15.002	0	0	0	0	0	L
L CO18050	CO18065	B	4ACSR	6.99Y	116.5	0.00	9.48	0.00	0	0	0	100	0.00	0.0	14.467	0	0	0	1	1	L
L CO18048	OH280114002	B	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	13.875	0	0	0	0	0	L
L CO17904	CO17901	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.225	0	0	0	0	2	L
L CO23826	CO17904	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.291	0	0	0	0	2	L
L CO18063	CO23826	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.424	0	0	0	0	2	L
L CO18091	CO18063	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.537	0	0	0	1	2	L
L CO18092	CO18091	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.613	0	0	0	0	1	L
L CO18064	CO18092	B	4ACSR	6.99Y	116.6	0.00	9.44	0.00	0	0	0	100	0.00	0.0	13.727	0	0	0	1	1	L
L CO17794	CO17793	C	4ACSR	7.00Y	116.6	1.50	9.36	66.28	47	453	125	96	5.33	1.2	11.334	0	0	0	0	127	L
L CO17795	CO17794	C	4ACSR	6.96Y	116.1	0.56	9.92	64.78	46	437	120	96	1.94	0.4	11.521	0	0	0	0	125	L
L CO17796	CO17795	C	4ACSR	6.91Y	115.2	0.83	10.75	64.78	46	435	119	96	2.88	0.7	11.798	0	0	0	0	125	L
L CO17757	CO17796	C	4ACSR	6.90Y	114.9	0.31	11.06	58.53	42	391	106	97	0.97	0.2	11.911	0	0	0	1	106	L
L CO17758	CO17757	C	4ACSR	6.87Y	114.4	0.51	11.57	55.19	39	367	100	96	1.50	0.4	12.110	0	0	0	2	103	L
L CO17768	CO17758	C	4ACSR	6.87Y	114.4	0.01	11.57	1.57	1	10	3	96	0.00	0.0	12.190	0	0	0	1	1	L
L CO17797	CO17758	C	4ACSR	6.86Y	114.4	0.05	11.61	50.87	36	337	92	96	0.13	0.0	12.130	0	0	0	1	100	L
L CO17798	CO17797	C	4ACSR	6.85Y	114.1	0.26	11.87	50.06	36	331	91	96	0.70	0.2	12.243	0	0	0	0	99	L
L CO17799	CO17798	C	4ACSR	6.83Y	113.9	0.22	12.09	50.06	36	331	90	96	0.59	0.2	12.337	0	0	0	0	99	L
L CO17800	CO17799	C	4ACSR	6.83Y	113.9	0.00	12.09	0.31	0	2	1	89	0.00	0.0	12.409	0	0	0	1	2	L
L CO17801	CO17800	C	4ACSR	6.83Y	113.9	0.00	12.09	0.00	0	0	0	100	0.00	0.0	12.450	0	0	0	0	1	L
L CO17802	CO17801	C	4ACSR	6.83Y	113.9	0.00	12.09	0.00	0	0	0	100	0.00	0.0	12.468	0	0	0	0	1	L
L CO17803	CO17802	C	4ACSR	6.83Y	113.9	0.00	12.09	0.00	0	0	0	100	0.00	0.0	12.556	0	0	0	1	1	L
L CO17759	CO17799	C	4ACSR	6.80Y	113.4	0.50	12.59	49.75	36	328	89	97	1.32	0.4	12.553	0	0	0	0	97	L
L CO17769	CO17759	C	4ACSR	6.80Y	113.4	0.00	12.59	0.00	0	0	0	100	0.00	0.0	12.609	0	0	0	1	1	L
L CO17760	CO17760	C	4ACSR	6.78Y	113.0	0.44	13.03	49.75	36	327	89	96	1.18	0.4	12.745	0	0	0	0	96	L
L CO17804	CO17760	C	4ACSR	6.78Y	113.0	0.00	13.04	0.73	1	5	1	98	0.00	0.0	12.838	0	0	0	1	2	L
L CO17805	CO17804	C	4ACSR	6.78Y	113.0	0.00	13.04	0.73	1	5	1	98	0.00	0.0	12.880	0	0	0	1	1	L
L CO30636	CO17760	C	4ACSR	6.71Y	111.8	1.20	14.23	49.02	35	321	87	97	3.15	1.0	13.274	0	0	0	1	94	L
L CO7182	CO30636	C	4ACSR	6.69Y	111.6	0.19	14.42	49.02	35	318	85	97	0.50	0.2	13.358	0	0	0	1	93	L
L CO7181	CO7182	C	4ACSR	6.68Y	111.3	0.25	14.67	49.02	35	317	84	97	0.67	0.2	13.470	0	0	0	1	92	L
L CO7180	CO7181	C	4ACSR	6.67Y	111.1	0.20	14.88	49.02	35	316	84	97	0.53	0.2	13.559	0	0	0	0	91	L
L CO7179	CO7180	C	4ACSR	6.66Y	111.1	0.04	14.92	49.02	35	316	84	97	0.11	0.0	13.579	0	0	0	0	91	L
L CO7175	CO7179	C	4ACSR	6.64Y	110.7	0.41	15.33	49.02	35	316	84	97	1.07	0.3	13.758	0	0	0	0	90	L
L CO7177	CO7175	C	4ACSR	6.64Y	110.7	0.00	15.33	0.75	1	5	1	98	0.00	0.0	13.887	0	0	0	1	1	L
L CO7178	CO7175	C	4ACSR	6.62Y	110.4	0.30	15.62	48.27	34	310	82	97	0.77	0.2	13.891	0	0	0	1	89	L
L CO8365	CO7178	C	4ACSR	6.59Y	109.9	0.49	16.11	47.64	34	305	80	97	1.24	0.4	14.112	0	0	0	0	88	L
L CO7217	CO8365	C	4ACSR	6.58Y	109.7	0.17	16.27	47.46	34	303	79	97	0.42	0.1	14.187	0	0	0	0	87	L
L CO7218	CO7217	C	4ACSR	6.57Y	109.5	0.26	16.53	47.02	34	299	78	97	0.65	0.2	14.306	0	0	0	0	86	L
L CO7234	CO7218	C	4ACSR	6.57Y	109.5	0.01	16.54	2.27	2	14	4	96	0.00	0.0	14.391	0	0	0	2	2	L
L CO7280	CO7218	C	4ACSR	6.56Y	109.3	0.17	16.70	44.74	32	284	74	97	0.41	0.1	14.388	0	0	0	1	84	L
L CO7281	CO7280	C	4ACSR	6.55Y	109.1	0.22	16.92	44.74	32	284	74	97	0.52	0.2	14.492	0	0	0	0	83	L
L CO7282	CO7281	C	4ACSR	6.50Y	108.4	0.70	17.62	43.11	31	273	71	97	1.63	0.6	14.845	0	0	0	1	82	L
L CO7283	CO7282	C	4ACSR	6.48Y	108.0	0.39	18.01	43.05	31	271	70	97	0.91	0.3	15.043	0	0	0	1	81	L
L CO7235	CO7283	C	4ACSR	6.48Y	108.0	0.00	18.01	0.75	1	5	1	98	0.00	0.0	15.119	0	0	0	2	2	L
L CO7219	CO7283	C	4ACSR	6.46Y	107.7	0.25	18.26	42.08	30	264	68	97	0.57	0.2	15.173	0	0	0	0	78	L
L CO7306	CO7219	C	4ACSR	6.46Y																	

Balanced Voltage Drop Report
Source: CHARTERS SUB

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		Units Displayed In Volts														-----Element-----					
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
L CO7304	OC195	C	4ACSR	6.37Y	106.2	0.00	19.81	16.40	12	101	26	97	0.00	0.0	16.111	0	0	0	0	24	L
L CO7237	CO7304	C	4ACSR	6.37Y	106.2	0.01	19.82	1.26	1	8	2	97	0.00	0.0	16.225	0	0	0	1	1	L
L CO7305	CO7304	C	4ACSR	6.36Y	106.0	0.19	20.00	14.14	10	87	22	97	0.14	0.2	16.397	0	0	0	0	23	L
L CO7288	CO7305	C	4ACSR	6.35Y	105.9	0.10	20.11	14.14	10	87	22	97	0.08	0.1	16.558	0	0	0	1	23	L
L CO7289	CO7288	C	4ACSR	6.34Y	105.7	0.16	20.26	14.14	10	87	22	97	0.12	0.1	16.802	0	0	0	0	22	L
L CO7248	CO7289	C	4ACSR	6.34Y	105.7	0.00	20.26	0.00	0	0	0	100	0.00	0.0	16.897	0	0	0	0	2	L
L CO7290	CO7248	C	4ACSR	6.34Y	105.7	0.00	20.26	0.00	0	0	0	100	0.00	0.0	16.956	0	0	0	1	2	L
L CO7291	CO7290	C	4ACSR	6.34Y	105.7	0.00	20.26	0.00	0	0	0	100	0.00	0.0	17.049	0	0	0	0	1	L
L CO7249	CO7291	C	4ACSR	6.34Y	105.7	0.00	20.26	0.00	0	0	0	100	0.00	0.0	17.146	0	0	0	1	1	L
L CO7292	CO7289	C	4ACSR	6.34Y	105.6	0.11	20.37	14.14	10	87	22	97	0.08	0.1	16.971	0	0	0	1	20	L
L CO7308	CO7292	C	4ACSR	6.33Y	105.6	0.07	20.45	13.32	10	82	21	97	0.05	0.1	17.087	0	0	0	0	19	L
L CO7250	CO7308	C	4ACSR	6.33Y	105.5	0.03	20.48	13.32	10	82	21	97	0.02	0.0	17.144	0	0	0	0	19	L
L CO7251	CO7250	C	4ACSR	6.33Y	105.5	0.04	20.52	9.89	7	61	15	97	0.02	0.0	17.241	0	0	0	1	16	L
L CO7293	CO7251	C	4ACSR	6.33Y	105.4	0.05	20.57	9.13	7	56	14	97	0.02	0.0	17.359	0	0	0	1	15	L
L CO7294	CO7293	C	4ACSR	6.32Y	105.4	0.02	20.59	9.13	7	56	14	97	0.01	0.0	17.406	0	0	0	1	14	L
L CO7252	CO7294	C	2ACSR	6.32Y	105.4	0.02	20.62	8.78	5	54	14	97	0.01	0.0	17.481	0	0	0	0	13	L
L CO-1583953138	CO7252	C	2ACSR	6.32Y	105.4	0.00	20.62	0.16	0	1	0	100	0.00	0.0	17.519	0	0	0	1	1	L
L CO-252799462	CO7252	C	2ACSR	6.32Y	105.4	0.01	20.62	8.63	5	53	13	97	0.00	0.0	17.506	0	0	0	0	12	L
L CO7253	CO-252799462	C	2ACSR	6.32Y	105.4	0.01	20.64	8.63	5	53	13	97	0.01	0.0	17.553	0	0	0	0	12	L
L CO-1600906257	CO7253	C	2ACSR	6.32Y	105.4	0.00	20.64	1.39	1	9	2	98	0.00	0.0	17.581	0	0	0	1	1	L
L CO187661795	CO7253	C	2ACSR	6.32Y	105.4	0.01	20.65	7.23	4	44	11	97	0.00	0.0	17.610	0	0	0	0	11	L
L CO-1547166765	CO187661795	C	2ACSR	6.32Y	105.3	0.02	20.67	6.03	3	37	9	97	0.01	0.0	17.734	0	0	0	0	10	L
L CO7302	CO-1547166765	C	4ACSR	6.32Y	105.3	0.02	20.69	6.03	4	37	9	97	0.01	0.0	17.799	0	0	0	0	10	L
L CO7303	CO7302	C	4ACSR	6.32Y	105.3	0.02	20.71	4.76	3	29	7	97	0.00	0.0	17.883	0	0	0	2	8	L
L CO7301	CO7303	C	4ACSR	6.32Y	105.3	0.03	20.74	3.65	3	22	6	96	0.01	0.0	18.059	0	0	0	1	6	L
L CO7297	CO7301	C	4ACSR	6.32Y	105.3	0.01	20.75	3.65	3	22	6	96	0.00	0.0	18.111	0	0	0	1	5	L
L CO7298	CO7297	C	4ACSR	6.31Y	105.2	0.05	20.80	3.65	3	22	6	96	0.01	0.0	18.407	0	0	0	0	4	L
L CO7295	CO7298	C	4ACSR	6.31Y	105.2	0.01	20.80	3.65	3	22	6	96	0.00	0.0	18.444	0	0	0	1	4	L
L CO7296	CO7295	C	4ACSR	6.31Y	105.2	0.01	20.82	1.81	1	11	3	96	0.00	0.0	18.608	0	0	0	0	3	L
L CO7254	CO7296	C	4ACSR	6.31Y	105.2	0.03	20.84	1.81	1	11	3	96	0.00	0.0	18.918	0	0	0	1	3	L
L CO7255	CO7254	C	4ACSR	6.31Y	105.1	0.01	20.85	1.59	1	10	2	98	0.00	0.0	19.036	0	0	0	1	1	L
L CO7256	CO7254	C	2ACSR	6.31Y	105.2	0.00	20.84	0.22	0	1	0	100	0.00	0.0	19.032	0	0	0	0	1	L
L CO7257	CO7256	C	2ACSR	6.31Y	105.2	0.00	20.84	0.22	0	1	0	100	0.00	0.0	19.171	0	0	0	1	1	L
L CO7243	CO7302	C	2ACSR	6.32Y	105.3	0.00	20.69	1.27	1	8	2	97	0.00	0.0	17.854	0	0	0	2	2	L
L CO-1758940501	CO187661795	C	2ACSR	6.32Y	105.4	0.00	20.65	1.20	1	7	2	96	0.00	0.0	17.642	0	0	0	1	1	L
L CO7231	CO7250	C	4ACSR	6.33Y	105.5	0.01	20.49	3.42	2	21	5	97	0.00	0.0	17.201	0	0	0	3	3	L
L CO-344705497	CO7308	C	2ACSR	6.33Y	105.6	0.00	20.45	0.00	0	0	0	100	0.00	0.0	17.134	0	0	0	0	0	L
L CO7238	CO7305	C	4ACSR	6.36Y	106.0	0.00	20.00	0.00	0	0	0	100	0.00	0.0	16.448	0	0	0	0	0	L
L CO7221	CO7247	C	4ACSR	6.37Y	106.2	0.05	19.78	20.74	15	128	33	97	0.06	0.0	16.051	0	0	0	0	44	L
L CO7222	CO7221	C	4ACSR	6.37Y	106.2	0.04	19.82	20.20	14	125	32	97	0.04	0.0	16.094	0	0	0	0	42	L
L CO7240	CO7222	C	4ACSR	6.37Y	106.2	0.00	19.82	0.30	0	2	0	100	0.00	0.0	16.160	0	0	0	1	1	L
L CO7223	CO7222	C	4ACSR	6.36Y	106.1	0.11	19.93	19.90	14	123	31	97	0.12	0.1	16.211	0	0	0	0	41	L
L CO7241	CO7223	C	4ACSR	6.36Y	106.1	0.00	19.93	0.09	0	1	0	100	0.00	0.0	16.283	0	0	0	1	1	L
L CO7258	CO7223	C	4ACSR	6.36Y	106.0	0.03	19.96	19.81	14	122	31	97	0.03	0.0	16.247	0	0	0	0	40	L
L CO8363	CO7258	C	4ACSR	6.35Y	105.8	0.25	20.21	19.81	14	122	31	97	0.27	0.2	16.519	0	0	0	0	40	L
L CO7101	CO8363	C	4ACSR	6.34Y	105.7	0.08	20.28	19.09	14	117	30	97	0.08	0.1	16.605	0	0	0	0	37	L
L CO7106	CO7101	C	4ACSR	6.34Y	105.7	0.00	20.28	0.00	0	0	0	100	0.00	0.0	16.636	0	0	0	0	0	L
L CO7122	CO7101	C	4ACSR	6.34Y	105.7	0.05	20.34	19.09	14	117	30	97	0.06	0.0	16.668	0	0	0	2	37	L
L CO7123	CO7122	C	4ACSR	6.33Y	105.5	0.12	20.46	17.97	13	110	28	97	0.12	0.1	16.813	0	0	0	1	35	L
L CO7124	CO7123	C	4ACSR	6.32Y	105.3	0.20	20.66	17.39	12	107	27	97	0.19	0.2	17.063	0	0	0	0	34	L
L CO7125	CO7124	C	4ACSR	6.32Y	105.3	0.01	20.66	1.56	1	10	2	98	0.00	0.0	17.141	0	0	0	0	1	L
L CO7126	CO7125	C	4ACSR	6.32Y	105.3	0.00	20.67	1.56	1	10	2	98	0.00	0.0	17.162	0	0	0	1	1	L
L CO7128	CO7124	C	4ACSR	6.32Y	105.3	0.05	20.71	15.83	11	97	24	97	0.04	0.0	17.127	0	0	0	1	33	L
L CO7129	CO7128	C	4ACSR	6.32Y	105.3	0.01	20.72	15.26	11	94	24	97	0.01	0.0	17.142	0	0	0	0	32	L
L CO7127	CO7129	C	4ACSR	6.31Y	105.2	0.12	20.84	15.26	11	93	24	97	0.10	0.1	17.318	0	0	0	0	32	L
L CO7130	CO7127	C	4ACSR	6.31Y	105.1	0.02	20.86	11.63	8	71	18	97	0.01	0.0	17.354	0	0	0	1	24	L
L CO7131	CO7130	C	4ACSR	6.30Y	105.1	0.07	20.93	10.36	7	63	16	97	0.04	0.1	17.504	0	0	0	0	23	L
L CO7132	CO7131	C	4ACSR	6.30Y	105.0	0.06	20.99	10.36	7	63	16	97	0.03	0.1	17.624	0	0	0	2	23	L
L CO7133	CO7132	C	4ACSR	6.30Y	105.0	0.01	21.00	8.87	6	54	14	97	0.00	0.0	17.642	0	0	0	1	21	L
L CO7134	CO7133	C	4ACSR	6.30Y	105.0	0.01	21.00	7.00	5	43	11	97	0.00	0.0	17.658	0	0	0	0	20	L
L CO7172	CO7134	C	700 MCM Hd	6.30Y	105.0	0.00	21.00	7.00	1	43	11	97	0.00	0.0	17.665	0	0	0	0	20	L
L OC194	CO7172	C	10 H OCR	6.30Y	105.0	0.00	21.00	7.00	70	43	11	97	0.00	0.0	17.665	0	0	0	0	20	L
L CO7140	OC194	C	4ACSR	6.30Y	105.0	0.01	21.01	4.35	3	27	7	97	0.00	0.0	17.735	0	0	0	2	12	L
L CO7141	CO7140	C	4ACSR	6.30Y	104.9	0.05	21.07	4.35	3	27	7	97	0.01	0.0	17.996	0	0	0	0	10	L
L CO7108	CO7141	C	4ACSR	6.30Y	104.9	0.00	21.07	1.33	1	8	2	97	0.00	0.0	18.043	0	0	0	2	2	L
L CO7102	CO7141	C	4ACSR	6.29Y	104.9	0.03	21.09	3.01	2	18	5	96	0.00	0.0	18.181	0	0	0	0	8	L
L CO7103	CO7102	C	4ACSR	6.29Y	104.9	0.00	21.09	0.00	0	0	0										

Balanced Voltage Drop Report
Source: CHARTERS SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru	
L C07139	C07138	C	4ACSR	6.30Y	104.9	0.02	21.06	1.58	1	10	2	98	0.00	0.0	18.334	0	0	0	2	L
L C07109	C07139	C	4ACSR	6.30Y	104.9	0.00	21.06	0.28	0	2	0	100	0.00	0.0	18.381	0	0	0	1	L
L C07110	C07139	C	4ACSR	6.30Y	104.9	0.01	21.07	1.29	1	8	2	97	0.00	0.0	18.485	0	0	0	1	L
L CO-1432945604	C07138	C	2ACSR	6.30Y	105.0	0.00	21.04	0.55	0	3	1	95	0.00	0.0	18.057	0	0	0	1	L
L C07111	C07137	C	4ACSR	6.30Y	105.0	0.00	21.03	0.43	0	3	1	95	0.00	0.0	17.962	0	0	0	3	L
L C07173	C07127	C	4ACSR	6.31Y	105.2	0.00	20.84	3.63	3	22	6	96	0.00	0.0	17.325	0	0	0	0	L
L OC193	C07173	C	15 H OCR	6.31Y	105.2	0.00	20.84	3.63	24	22	6	96	0.00	0.0	17.325	0	0	0	0	L
L C07174	OC193	C	4ACSR	6.31Y	105.1	0.02	20.86	3.63	3	22	6	96	0.00	0.0	17.439	0	0	0	0	L
L C07144	C07174	C	4ACSR	6.31Y	105.1	0.01	20.87	3.63	3	22	6	96	0.00	0.0	17.500	0	0	0	0	L
L C07107	C07144	C	4ACSR	6.31Y	105.1	0.00	20.87	0.76	1	5	1	98	0.00	0.0	17.595	0	0	0	1	L
L C07145	C07144	C	4ACSR	6.31Y	105.1	0.04	20.91	2.87	2	18	4	98	0.01	0.0	17.803	0	0	0	0	L
L C07146	C07145	C	4ACSR	6.30Y	105.1	0.02	20.93	2.87	2	18	4	98	0.00	0.0	17.959	0	0	0	0	L
L C07147	C07146	C	4ACSR	6.30Y	105.1	0.02	20.95	2.87	2	18	4	98	0.00	0.0	18.087	0	0	0	0	L
L C07148	C07147	C	4ACSR	6.30Y	105.0	0.01	20.96	2.87	2	18	4	98	0.00	0.0	18.182	0	0	0	0	L
L C07149	C07148	C	4ACSR	6.30Y	105.0	0.01	20.97	2.87	2	18	4	98	0.00	0.0	18.286	0	0	0	0	L
L C07150	C07149	C	4ACSR	6.30Y	105.0	0.01	20.98	2.41	2	15	4	97	0.00	0.0	18.376	0	0	0	0	L
L C07151	C07150	C	4ACSR	6.30Y	105.0	0.01	21.00	2.41	2	15	4	97	0.00	0.0	18.490	0	0	0	0	L
L C07152	C07151	C	4ACSR	6.30Y	105.0	0.01	21.00	2.41	2	15	4	97	0.00	0.0	18.547	0	0	0	0	L
L C07153	C07152	C	4ACSR	6.30Y	105.0	0.01	21.01	2.41	2	15	4	97	0.00	0.0	18.608	0	0	0	0	L
L C07154	C07153	C	4ACSR	6.30Y	105.0	0.01	21.02	2.41	2	15	4	97	0.00	0.0	18.676	0	0	0	0	L
L C07155	C07154	C	4ACSR	6.30Y	105.0	0.01	21.03	2.41	2	15	4	97	0.00	0.0	18.745	0	0	0	1	L
L C07156	C07149	C	4ACSR	6.30Y	105.0	0.00	20.98	0.46	0	3	1	95	0.00	0.0	18.331	0	0	0	1	L
L C07157	C07156	C	4ACSR	6.30Y	105.0	0.00	20.98	0.46	0	3	1	95	0.00	0.0	18.475	0	0	0	0	L
L C07158	C07157	C	4ACSR	6.30Y	105.0	0.00	20.98	0.19	0	1	0	100	0.00	0.0	18.759	0	0	0	0	L
L C07159	C07158	C	4ACSR	6.30Y	105.0	0.00	20.98	0.19	0	1	0	100	0.00	0.0	18.844	0	0	0	0	L
L C07160	C07159	C	4ACSR	6.30Y	105.0	0.00	20.98	0.19	0	1	0	100	0.00	0.0	19.071	0	0	0	0	L
L C07161	C07160	C	4ACSR	6.30Y	105.0	0.00	20.98	0.19	0	1	0	100	0.00	0.0	19.145	0	0	0	0	L
L C07162	C07161	C	4ACSR	6.30Y	105.0	0.00	20.98	0.19	0	1	0	100	0.00	0.0	19.170	0	0	0	0	L
L C07163	C07162	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.291	0	0	0	0	L
L C07164	C07163	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.352	0	0	0	0	L
L C07165	C07164	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.404	0	0	0	0	L
L C07166	C07165	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.458	0	0	0	0	L
L C07167	C07166	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.598	0	0	0	0	L
L C07168	C07167	C	4ACSR	6.30Y	105.0	0.00	20.99	0.19	0	1	0	100	0.00	0.0	19.690	0	0	0	1	L
L C07169	C07157	C	4ACSR	6.30Y	105.0	0.00	20.98	0.27	0	2	0	100	0.00	0.0	18.601	0	0	0	1	L
L C07170	C07169	C	4ACSR	6.30Y	105.0	0.00	20.98	0.27	0	2	0	100	0.00	0.0	18.873	0	0	0	0	L
L C07171	C07170	C	4ACSR	6.30Y	105.0	0.00	20.98	0.27	0	2	0	100	0.00	0.0	18.949	0	0	0	0	L
L C07104	C07171	C	4ACSR	6.30Y	105.0	0.00	20.99	0.25	0	2	0	100	0.00	0.0	19.188	0	0	0	2	L
L C07105	C07171	C	4ACSR	6.30Y	105.0	0.00	20.98	0.02	0	0	0	100	0.00	0.0	18.987	0	0	0	1	L
L C07114	CO8363	C	4ACSR	6.35Y	105.8	0.00	20.21	0.73	1	4	1	97	0.00	0.0	16.544	0	0	0	1	L
L C07115	C07114	C	4ACSR	6.35Y	105.8	0.01	20.22	0.41	0	3	1	95	0.00	0.0	16.888	0	0	0	0	L
L C07116	C07115	C	4ACSR	6.35Y	105.8	0.00	20.22	0.41	0	3	1	95	0.00	0.0	17.024	0	0	0	1	L
L C07117	C07116	C	4ACSR	6.35Y	105.8	0.00	20.22	0.41	0	3	1	95	0.00	0.0	17.039	0	0	0	0	L
L OH280765002	C07117	C	4ACSR	6.35Y	105.8	0.00	20.22	0.00	0	0	0	100	0.00	0.0	17.087	0	0	0	0	L
L OH280765003	OH280765002	C	4ACSR	6.35Y	105.8	0.00	20.22	0.00	0	0	0	100	0.00	0.0	17.143	0	0	0	0	L
L C07118	C07117	C	4ACSR	6.35Y	105.8	0.01	20.22	0.41	0	3	1	95	0.00	0.0	17.361	0	0	0	0	L
L C07119	C07118	C	4ACSR	6.35Y	105.8	0.00	20.23	0.41	0	3	1	95	0.00	0.0	17.437	0	0	0	0	L
L OH280765001	C07119	C	4ACSR	6.35Y	105.8	0.00	20.23	0.00	0	0	0	100	0.00	0.0	17.498	0	0	0	0	L
L OH280775001	OH280765001	C	4ACSR	6.35Y	105.8	0.00	20.23	0.00	0	0	0	100	0.00	0.0	17.690	0	0	0	0	L
L C07120	C07119	C	4ACSR	6.35Y	105.8	0.00	20.23	0.41	0	3	1	95	0.00	0.0	17.494	0	0	0	0	L
L C07121	C07120	C	4ACSR	6.35Y	105.8	0.00	20.23	0.41	0	3	1	95	0.00	0.0	17.541	0	0	0	1	L
L C07239	C07221	C	4ACSR	6.37Y	106.2	0.00	19.78	0.00	0	0	0	100	0.00	0.0	16.107	0	0	0	1	L
L C07242	C07221	C	2ACSR	6.37Y	106.2	0.00	19.78	0.53	0	3	1	95	0.00	0.0	16.104	0	0	0	1	L
L C07236	C07219	C	4ACSR	6.46Y	107.7	0.00	18.27	1.38	1	9	2	98	0.00	0.0	15.220	0	0	0	2	L
L C07244	C07281	C	4ACSR	6.54Y	109.1	0.01	16.92	1.63	1	10	3	96	0.00	0.0	14.567	0	0	0	1	L
L C07233	C07217	C	4ACSR	6.58Y	109.7	0.00	16.28	0.45	0	3	1	95	0.00	0.0	14.260	0	0	0	1	L
L C07232	CO8365	C	4ACSR	6.59Y	109.9	0.00	16.11	0.17	0	1	0	100	0.00	0.0	14.198	0	0	0	1	L
L C07176	C07179	C	4ACSR	6.66Y	111.1	0.00	14.92	0.00	0	0	0	100	0.00	0.0	13.721	0	0	0	1	L
L C017767	C017757	C	4ACSR	6.90Y	114.9	0.01	11.07	2.52	2	17	4	97	0.00	0.0	11.985	0	0	0	2	L
L C017831	C017796	C	4ACSR	6.91Y	115.2	0.00	10.75	6.25	4	42	11	97	0.00	0.0	11.804	0	0	0	0	L
L OC538	C017831	C	25 H OCR	6.91Y	115.2	0.00	10.75	6.25	25	42	11	97	0.00	0.0	11.804	0	0	0	0	L
L C017832	OC538	C	4ACSR	6.91Y	115.2	0.02	10.78	6.25	4	42	11	97	0.01	0.0	11.883	0	0	0	0	L
L C017806	C017832	C	4ACSR	6.91Y	115.2	0.06	10.84	4.33	3	29	7	97	0.01	0.0	12.193	0	0	0	0	L
L C017807	C017806	C	4ACSR	6.91Y	115.1	0.03	10.87	4.33	3	29	7	97	0.01	0.0	12.358	0	0	0	0	L
L C017808	C017807	C	4ACSR	6.91Y	115.1	0.03	10.90	4.33	3	29	7	97	0.01	0.0	12.491	0	0	0	0	L
L C017809	C017808	C	4ACSR	6.90Y	115.1	0.03	10.92	4.33	3	29	7	97	0.01	0.0	12.622	0	0	0	0	L
L C017810	C017809	C	4ACSR	6.90Y	115.1	0.01	10.94	3.67	3	25	6	97	0.00	0.0	12.703	0	0	0	1	L
L C017811	C017810	C	4ACSR	6.90Y	115.1	0.00	10.94	0.31	0	2	1	89	0.00	0.0	12.743	0	0	0	1	L
L C017812	C017811	C	4ACSR	6.90Y	115.1	0.00	10.94	0.28	0	2	0	100	0.00	0.0	12.785	0	0	0	0	L
L C017813	C017812	C	4ACSR	6.90Y	115.1	0.00	10.94	0.28	0	2										

Balanced Voltage Drop Report
Source: CHARTERS SUB

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
L CO1636660624	CO-1500553810	C	2ACSR	6.90Y	115.0	0.00	10.95	0.00	0	0	0	100	0.00	0.0	14.095	0	0	0	1	1	L
L CO17819	CO17809	C	4ACSR	6.90Y	115.1	0.00	10.93	0.67	0	4	1	97	0.00	0.0	12.781	0	0	0	0	12	L
L CO30637	CO17819	C	4ACSR	6.90Y	115.1	0.01	10.94	0.67	0	4	1	97	0.00	0.0	13.077	0	0	0	0	12	L
L CO7183	CO30637	C	4ACSR	6.90Y	115.1	0.01	10.95	0.67	0	4	1	97	0.00	0.0	13.394	0	0	0	0	12	L
L CO7184	CO7183	C	4ACSR	6.90Y	115.1	0.00	10.95	0.67	0	4	1	97	0.00	0.0	13.414	0	0	0	1	12	L
L CO7185	CO7184	C	4ACSR	6.90Y	115.0	0.01	10.96	0.67	0	4	1	97	0.00	0.0	13.728	0	0	0	1	11	L
L CO7186	CO7185	C	4ACSR	6.90Y	115.0	0.00	10.96	0.67	0	4	1	97	0.00	0.0	13.843	0	0	0	0	10	L
L CO7187	CO7186	C	4ACSR	6.90Y	115.0	0.00	10.96	0.67	0	4	1	97	0.00	0.0	13.973	0	0	0	0	10	L
L CO7188	CO7187	C	4ACSR	6.90Y	115.0	0.00	10.97	0.67	0	4	1	97	0.00	0.0	14.125	0	0	0	0	10	L
L CO7189	CO7188	C	4ACSR	6.90Y	115.0	0.01	10.98	0.67	0	4	1	97	0.00	0.0	14.312	0	0	0	0	10	L
L CO7190	CO7189	C	4ACSR	6.90Y	115.0	0.00	10.98	0.67	0	4	1	97	0.00	0.0	14.380	0	0	0	0	10	L
L CO7191	CO7190	C	4ACSR	6.90Y	115.0	0.01	10.98	0.67	0	4	1	97	0.00	0.0	14.583	0	0	0	0	10	L
L CO7192	CO7191	C	4ACSR	6.90Y	115.0	0.01	10.99	0.67	0	4	1	97	0.00	0.0	14.808	0	0	0	0	10	L
L CO7193	CO7192	C	4ACSR	6.90Y	115.0	0.00	10.99	0.67	0	4	1	97	0.00	0.0	14.905	0	0	0	0	10	L
L CO7194	CO7193	C	4ACSR	6.90Y	115.0	0.00	11.00	0.67	0	4	1	97	0.00	0.0	14.994	0	0	0	1	10	L
L CO7195	CO7194	C	4ACSR	6.90Y	115.0	0.00	11.00	0.67	0	4	1	97	0.00	0.0	15.030	0	0	0	1	9	L
L CO7196	CO7195	C	4ACSR	6.90Y	115.0	0.00	11.00	0.67	0	4	1	97	0.00	0.0	15.067	0	0	0	0	8	L
L CO7197	CO7196	C	4ACSR	6.90Y	115.0	0.00	11.00	0.67	0	4	1	97	0.00	0.0	15.119	0	0	0	1	8	L
L CO7198	CO7197	C	4ACSR	6.90Y	115.0	0.00	11.00	0.08	0	1	0	100	0.00	0.0	15.210	0	0	0	1	7	L
L CO7199	CO7198	C	4ACSR	6.90Y	115.0	0.00	11.00	0.06	0	0	0	100	0.00	0.0	15.302	0	0	0	0	6	L
L CO7200	CO7199	C	4ACSR	6.90Y	115.0	0.00	11.00	0.06	0	0	0	100	0.00	0.0	15.370	0	0	0	2	6	L
L CO7201	CO7200	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.395	0	0	0	0	4	L
L CO8362	CO7201	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.406	0	0	0	0	4	L
L CO7079	CO8362	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.496	0	0	0	0	4	L
L CO7080	CO7079	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.552	0	0	0	0	4	L
L CO7081	CO7080	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.675	0	0	0	0	4	L
L CO7082	CO7081	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.810	0	0	0	0	4	L
L CO7083	CO7082	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.894	0	0	0	0	4	L
L CO7084	CO7083	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.989	0	0	0	1	3	L
L CO7085	CO7084	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	16.049	0	0	0	1	2	L
L CO7086	CO7085	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	16.173	0	0	0	1	1	L
L CO7078	CO7083	C	4ACSR	6.90Y	115.0	0.00	11.00	0.00	0	0	0	100	0.00	0.0	15.972	0	0	0	1	1	L
L CO17766	CO17832	C	4ACSR	6.91Y	115.2	0.00	10.78	1.91	1	13	3	97	0.00	0.0	11.937	0	0	0	1	1	L
L CO-810810032	CO17832	C	2ACSR	6.91Y	115.2	0.00	10.78	0.00	0	0	0	100	0.00	0.0	11.940	0	0	0	1	1	L
L CO17765	CO17794	C	4ACSR	7.00Y	116.6	0.01	9.37	1.50	1	10	3	96	0.00	0.0	11.418	0	0	0	2	2	L

----- Feeder No. 0 (Herron Hill) Beginning with Device OC616 -----

L CO21285	CO21284	A	6ACWC	7.02Y	117.0	0.04	9.03	7.76	6	52	16	96	0.02	0.0	8.569	0	0	0	2	19	L
L OH210868001	CO21285	A	6ACWC	7.02Y	117.0	0.00	9.03	0.35	0	2	1	89	0.00	0.0	8.632	0	0	0	0	0	L
L CO21288	CO21285	A	6ACWC	7.01Y	116.9	0.06	9.09	7.17	5	48	15	95	0.02	0.0	8.757	0	0	0	1	17	L
L CO21287	CO21288	A	6ACWC	7.01Y	116.9	0.02	9.12	7.17	5	48	15	95	0.01	0.0	8.828	0	0	0	0	16	L
L CO21195	CO21287	A	6ACWC	7.01Y	116.9	0.02	9.14	6.45	5	43	13	96	0.01	0.0	8.904	0	0	0	0	12	L
L CO21196	CO21195	A	6ACWC	7.01Y	116.9	0.00	9.14	0.24	0	2	1	89	0.00	0.0	8.970	0	0	0	0	2	L
L CO21219	CO21196	A	6ACWC	7.01Y	116.9	0.00	9.14	0.00	0	0	0	100	0.00	0.0	9.023	0	0	0	0	0	L
L CO21220	CO21196	A	6ACWC	7.01Y	116.9	0.00	9.14	0.24	0	2	1	89	0.00	0.0	9.064	0	0	0	2	2	L
L CO-706580733	CO21195	A	2ACSR	7.01Y	116.8	0.04	9.18	6.21	3	42	13	96	0.01	0.0	9.081	0	0	0	0	10	L
L CO-2120450629	CO-706580733	A	2ACSR	7.01Y	116.8	0.02	9.19	5.92	3	40	12	96	0.01	0.0	9.172	0	0	0	0	9	L
L CO1389486039	CO-2120450629	A	2ACSR	7.01Y	116.8	0.05	9.24	5.92	3	40	12	96	0.01	0.0	9.416	0	0	0	0	9	L
L CO21331	CO1389486039	A	6ACWC	7.00Y	116.7	0.01	9.25	2.04	1	14	4	96	0.00	0.0	9.542	0	0	0	0	3	L
L CO21332	CO21331	A	6ACWC	7.00Y	116.7	0.01	9.26	2.04	1	14	4	96	0.00	0.0	9.607	0	0	0	1	2	L
L CO21332	CO21333	A	6ACWC	7.00Y	116.7	0.00	9.26	1.05	1	7	2	96	0.00	0.0	9.681	0	0	0	1	1	L
L CO21223	CO21331	A	4/OACSR	7.00Y	116.7	0.00	9.25	0.00	0	0	0	100	0.00	0.0	9.589	0	0	0	1	1	L
L CO21299	CO1389486039	A	6ACWC	7.00Y	116.7	0.02	9.27	3.89	3	26	8	96	0.00	0.0	9.548	0	0	0	1	6	L
L CO21292	CO21299	A	6ACWC	7.00Y	116.7	0.02	9.28	2.65	2	18	6	95	0.00	0.0	9.686	0	0	0	1	5	L
L CO21298	CO21292	A	6ACWC	7.00Y	116.7	0.01	9.29	1.62	1	11	3	96	0.00	0.0	9.807	0	0	0	1	4	L
L CO21293	CO21298	A	6ACWC	7.00Y	116.7	0.00	9.29	0.19	0	1	0	100	0.00	0.0	9.830	0	0	0	2	3	L
L CO21297	CO21293	A	6ACWC	7.00Y	116.7	0.00	9.29	0.10	0	1	0	100	0.00	0.0	9.848	0	0	0	0	1	L
L CO21294	CO21297	A	6ACWC	7.00Y	116.7	0.00	9.29	0.10	0	1	0	100	0.00	0.0	9.924	0	0	0	0	1	L
L CO21296	CO21294	A	6ACWC	7.00Y	116.7	0.00	9.29	0.10	0	1	0	100	0.00	0.0	10.144	0	0	0	0	1	L
L CO21295	CO21296	A	6ACWC	7.00Y	116.7	0.00	9.29	0.10	0	1	0	100	0.00	0.0	10.210	0	0	0	1	1	L
L CO937351556	CO-706580733	A	1/OPRIURD	7.01Y	116.8	0.00	9.18	0.29	0	2	0	100	0.00	0.0	9.119	0	0	0	1	1	L
L CO21289	CO21287	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	8.849	0	0	0	0	2	L
L CO21291	CO21289	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.320	0	0	0	0	2	L
L CO21290	CO21291	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.375	0	0	0	0	2	L
L CO21218	CO21290	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.441	0	0	0	0	2	L
L CO21328	CO21218	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.550	0	0	0	0	2	L
L CO21323	CO21328	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.653	0	0	0	0	2	L
L CO21327	CO21323	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	9.695	0	0	0	0	2	L
L CO21324	CO21327	A	6ACWC	7.01Y	116.9	0.00	9.12	0.00													

Balanced Voltage Drop Report
Source: CHARTERS SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																						
-Base Voltage:120.0-																						
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru		
L	CO22989		B	4ACSR	6.99Y	116.6	0.05	9.42	16.27	12	109	34	95	0.04	0.0	9.731	0	0	0	3	35	L
L	CO22990		B	4ACSR	6.99Y	116.5	0.09	9.51	15.11	11	101	32	95	0.07	0.1	9.857	0	0	0	0	32	L
L	CO22959		B	4ACSR	6.98Y	116.4	0.08	9.59	12.49	9	83	26	95	0.05	0.1	9.994	0	0	0	3	28	L
L	CO23067		B	4ACSR	6.98Y	116.4	0.05	9.64	8.23	6	55	17	96	0.02	0.0	10.132	0	0	0	3	25	L
L	CO23068		B	4ACSR	6.98Y	116.3	0.04	9.68	6.97	5	46	15	95	0.02	0.0	10.258	0	0	0	0	22	L
L	CO-44028702		B	4ACSR	6.98Y	116.3	0.02	9.70	6.97	5	46	15	95	0.01	0.0	10.312	0	0	0	0	22	L
L	CO1368036759		B	4ACSR	6.98Y	116.3	0.04	9.74	5.62	4	37	12	95	0.01	0.0	10.447	0	0	0	0	18	L
L	CO22916		B	4ACSR	6.98Y	116.3	0.00	9.74	0.24	0	2	1	89	0.00	0.0	10.484	0	0	0	2	2	L
L	CO22963		B	4ACSR	6.97Y	116.2	0.03	9.77	5.38	4	36	11	96	0.01	0.0	10.569	0	0	0	0	16	L
L	CO22964		B	4ACSR	6.97Y	116.2	0.01	9.77	5.38	4	36	11	96	0.00	0.0	10.596	0	0	0	1	16	L
L	CO22975		B	4ACSR	6.97Y	116.2	0.06	9.84	4.28	3	28	9	95	0.01	0.1	10.911	0	0	0	2	15	L
L	CO22976		B	4ACSR	6.97Y	116.2	0.00	9.84	2.08	1	14	4	96	0.00	0.0	10.953	0	0	0	4	13	L
L	CO22974		B	4ACSR	6.97Y	116.2	0.00	9.84	1.22	1	8	3	94	0.00	0.0	11.032	0	0	0	3	9	L
L	CO22973		B	4ACSR	6.97Y	116.2	0.00	9.85	1.20	1	8	3	94	0.00	0.0	11.060	0	0	0	0	6	L
L	CO22970		B	4ACSR	6.97Y	116.2	0.00	9.85	1.20	1	8	3	94	0.00	0.0	11.097	0	0	0	1	6	L
L	CO23038		B	4ACSR	6.97Y	116.2	0.00	9.85	0.41	0	3	1	95	0.00	0.0	11.147	0	0	0	0	3	L
L	CO23073		B	4ACSR	6.97Y	116.2	0.00	9.85	0.41	0	3	1	95	0.00	0.0	11.161	0	0	0	1	3	L
L	CO23074		B	4ACSR	6.97Y	116.2	0.00	9.85	0.10	0	1	0	100	0.00	0.0	11.177	0	0	0	2	2	L
L	CO23679		B	4ACSR	6.97Y	116.1	0.00	9.85	0.79	1	5	2	93	0.00	0.0	11.149	0	0	0	2	2	L
L	CO1329563639		B	4ACSR	6.98Y	116.3	0.02	9.72	1.36	1	9	3	95	0.00	0.0	10.601	0	0	0	0	4	L
L	CO-18456230		B	2ACSR	6.98Y	116.3	0.00	9.72	0.75	0	5	2	93	0.00	0.0	10.660	0	0	0	1	1	L
L	CO-1886072905		B	4ACSR	6.98Y	116.3	0.01	9.72	0.60	0	4	1	97	0.00	0.0	10.820	0	0	0	0	3	L
L	CO22917		B	4ACSR	6.98Y	116.3	0.00	9.72	0.00	0	0	0	100	0.00	0.0	10.877	0	0	0	1	1	L
L	CO22918		B	4ACSR	6.98Y	116.3	0.00	9.72	0.00	0	0	0	100	0.00	0.0	11.085	0	0	0	1	1	L
L	CO22919		B	4ACSR	6.98Y	116.3	0.00	9.73	0.60	0	4	1	97	0.00	0.0	10.846	0	0	0	1	1	L
L	CO22889		B	4ACSR	6.99Y	116.5	0.02	9.52	2.62	2	17	5	96	0.00	0.0	9.990	0	0	0	0	4	L
L	CO22914		B	4ACSR	6.99Y	116.5	0.02	9.54	2.33	2	16	5	95	0.00	0.0	10.164	0	0	0	2	2	L
L	CO22915		B	4ACSR	6.99Y	116.5	0.00	9.53	0.29	0	2	1	89	0.00	0.0	10.085	0	0	0	2	2	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	17229	164	0	0	0	0	707		0.00	18100	Lowest Voltage =	104.81 on Element C08301
KVAR	4276	33	-1581	-29	0	0	1314			4013	Max Accm VoltD =	21.19 on Element C08301
											Max Elem VoltD =	8.98 on Element RG150878001

Balanced Voltage Drop Report
Source: RECTORVILLE SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																									
-Base Voltage:120.0-																									
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru					
RECTORVILLE SUB		ABC	RECTORVILL	7.56Y	126.0	0.00	0.00	740.37	0	16312	3984	97	0.00	0.0	0.000	0	0	0	0	3137					
----- Feeder No. 0 (Plumville) Beginning with Device OC673 -----																									
P	CAP74	CO28597	B	Cap (300)	14.71Y	122.5	0.00	3.45	-7.09	0	0	-104	0	0.00	0.0	3.698	0	0	0	0	0	P			
P	UD200646001	CO28582	A	1/OPRIURD	14.66Y	122.2	0.00	3.83	-0.07	0	0	-1	0	0.00	0.0	6.318	0	0	0	0	0	P			
P	CO1852216540	CO-2005133090	A	1/OPRIURD	14.64Y	122.0	0.00	3.98	-0.10	0	0	-1	0	0.00	0.0	7.559	0	0	0	0	0	P			
----- Feeder No. 0 (Tollesboro) Beginning with Device OC672 -----																									
C	CO22364	OC672	ABC	4/OACSR	7.55Y	125.8	0.13	0.17	350.23	103	7763	1671	98	6.20	0.1	0.056	0	0	0	0	1454	C			
C	CO22365	CO22364	ABC	4/OACSR	7.52Y	125.3	0.51	0.67	350.23	103	7757	1661	98	23.86	0.3	0.201	0	0	0	0	0	1454	C		
C	CO22366	CO22365	ABC	4/OACSR	7.51Y	125.2	0.13	0.80	350.23	103	7733	1619	98	6.09	0.1	0.238	0	0	0	0	0	1454	C		
C	CO22367	CO22366	ABC	4/OACSR	7.50Y	125.0	0.24	1.04	350.23	103	7727	1608	98	11.30	0.1	0.307	0	0	0	0	0	1454	C		
C	CO22148	CO22367	ABC	1/0CU	7.41Y	123.6	1.38	2.42	340.67	110	7501	1566	98	68.01	0.9	0.659	0	0	0	0	0	2	1412	C	
C	CO22386	CO22148	ABC	1/0CU	7.39Y	123.2	0.34	2.76	340.41	110	7427	1475	98	16.74	0.2	0.746	0	0	0	0	0	1410	C		
C	CO22387	CO22386	ABC	1/0CU	7.35Y	122.4	0.81	3.57	340.41	110	7410	1453	98	40.20	0.5	0.954	0	0	0	0	0	1410	C		
C	CO22161	CO22387	ABC	1/0CU	7.31Y	121.9	0.55	4.12	335.54	108	7263	1388	98	27.13	0.4	1.099	0	0	0	0	0	1	1384	C	
C	CO22162	CO22161	ABC	1/0CU	7.31Y	121.8	0.10	4.22	335.08	108	7226	1351	98	4.81	0.1	1.125	0	0	0	0	0	0	1383	C	
C	CO22163	CO22162	ABC	1/0CU	7.30Y	121.6	0.14	4.36	296.44	96	6376	1254	98	5.93	0.1	1.165	0	0	0	0	0	1	1220	C	
C	CO22436	CO22163	ABC	1/0CU	7.29Y	121.5	0.18	4.54	296.21	96	6365	1245	98	7.91	0.1	1.220	0	0	0	0	0	0	1219	C	
C	CO22435	CO22436	ABC	1/0CU	7.28Y	121.3	0.11	4.65	296.21	96	6357	1235	98	4.81	0.1	1.253	0	0	0	0	0	2	1219	C	
C	CO21940	CO22435	ABC	1/0CU	7.27Y	121.1	0.24	4.89	296.05	96	6349	1228	98	10.36	0.2	1.324	0	0	0	0	0	1	1217	C	
C	CO22441	CO21940	ABC	1/0CU	7.26Y	121.0	0.06	4.96	292.15	94	6254	1206	98	2.69	0.0	1.342	0	0	0	0	0	0	1204	C	
C	CO22440	CO22441	ABC	1/0CU	7.26Y	121.0	0.04	5.00	292.15	94	6251	1202	98	1.69	0.0	1.354	0	0	0	0	0	2	1204	C	
C	CO22190	CO22440	ABC	1/0CU	7.25Y	120.9	0.12	5.11	291.83	94	6242	1199	98	5.06	0.1	1.390	0	0	0	0	0	4	1202	C	
C	CO22191	CO22190	ABC	1/0CU	7.25Y	120.8	0.11	5.22	291.49	94	6230	1192	98	4.59	0.1	1.423	0	0	0	0	0	0	1198	C	
C	CO22389	CO22191	ABC	1/0CU	7.24Y	120.7	0.05	5.27	288.88	93	6168	1182	98	2.13	0.0	1.438	0	0	0	0	0	0	1190	C	
C	CO22388	CO22389	ABC	1/0CU	7.23Y	120.5	0.25	5.52	288.88	93	6166	1179	98	10.41	0.2	1.513	0	0	0	0	0	0	1190	C	
C	CO21941	CO22388	ABC	1/0CU	7.21Y	120.2	0.26	5.78	288.13	93	6139	1163	98	11.13	0.2	1.593	0	0	0	0	0	0	1185	C	
C	CO22391	CO21941	ABC	1/0CU	7.18Y	119.7	0.52	6.30	285.51	92	6071	1143	98	21.85	0.4	1.754	0	0	0	0	0	0	1178	C	
C	CO22390	CO22391	ABC	1/0CU	7.18Y	119.6	0.09	6.40	285.51	92	6050	1114	98	3.93	0.1	1.783	0	0	0	0	0	0	1178	C	
C	CO22464	CO22390	ABC	1/0CU	7.16Y	119.3	0.27	6.67	285.31	92	6042	1108	98	11.55	0.2	1.868	0	0	0	0	0	0	1175	C	
C	CO22463	CO22464	ABC	1/0CU	7.15Y	119.1	0.18	6.86	285.31	92	6030	1093	98	7.70	0.1	1.925	0	0	0	0	0	0	1175	C	
C	CO22465	CO22463	ABC	1/0CU	7.13Y	118.8	0.30	7.15	285.31	92	6022	1083	98	12.51	0.2	2.018	0	0	0	0	0	0	1	1175	C
C	CO22280	CO22465	ABC	1/0CU	7.12Y	118.7	0.19	7.34	284.84	92	6000	1065	98	7.81	0.1	2.075	0	0	0	0	0	1	1174	C	
C	CO22193	CO22280	ABC	1/0CU	7.12Y	118.6	0.03	7.37	284.28	92	5980	1053	98	1.35	0.0	2.085	0	0	0	0	0	0	1173	C	
P	CO22317	CO22318	B	1/OPRIURD	7.05Y	117.5	0.00	8.54	-0.07	0	0	0	100	0.00	0.0	3.110	0	0	0	0	0	0	0	P	
L	CO22400	CO22401	ABC	1/0CU	7.00Y	116.7	0.53	9.32	260.46	84	5417	924	99	20.66	0.4	2.751	0	0	0	0	0	1	1088	L	
L	FSE561	CO22400	A	20 N FUSE	7.00Y	116.7	0.00	9.32	2.93	16	20	2	100	0.00	0.0	2.751	0	0	0	0	0	0	6	L	
L	CO22492	FSE561	A	4ACSR	7.00Y	116.7	0.00	9.32	2.93	2	20	2	100	0.00	0.0	2.758	0	0	0	0	0	0	6	L	
L	CO22493	CO22492	A	4ACSR	7.00Y	116.7	0.01	9.33	2.93	2	20	2	100	0.00	0.0	2.827	0	0	0	0	0	0	6	L	
L	CO22084	CO22493	A	4ACSR	7.00Y	116.7	0.01	9.34	2.92	2	20	2	100	0.00	0.0	2.903	0	0	0	0	0	1	5	L	
L	CO22342	CO22084	A	4ACSR	7.00Y	116.6	0.05	9.39	2.53	2	18	2	99	0.01	0.0	3.348	0	0	0	0	0	0	4	L	
L	CO22343	CO22342	A	4ACSR	7.00Y	116.6	0.01	9.40	0.92	1	6	1	99	0.00	0.0	3.600	0	0	0	0	0	1	2	L	
L	CO22212	CO22343	A	4ACSR	7.00Y	116.6	0.00	9.40	0.79	1	6	1	99	0.00	0.0	3.660	0	0	0	0	0	1	1	L	
L	CO22048	CO22212	A	2ACSR	7.00Y	116.6	0.01	9.40	1.61	1	11	1	100	0.00	0.0	3.514	0	0	0	0	0	2	2	L	
L	CO22012	CO22048	A	4ACSR	7.00Y	116.7	0.00	9.33	0.00	0	0	0	100	0.00	0.0	2.898	0	0	0	0	0	1	1	L	
L	CO21959	CO22012	ABC	1/0CU	6.99Y	116.5	0.20	9.52	259.33	84	5373	895	99	7.62	0.1	2.819	0	0	0	0	0	0	1081	L	
L	FSE562	CO21959	C	20 N FUSE	6.99Y	116.5	0.00	9.52	2.99	17	21	2	100	0.00	0.0	2.819	0	0	0	0	0	0	2	L	
L	CO22111	FSE562	C	4ACSR	6.99Y	116.5	0.01	9.53	2.99	2	21	2	100	0.00	0.0	2.896	0	0	0	0	0	1	2	L	
L	CO22110	CO22111	C	4ACSR	6.99Y	116.5	0.00	9.53	2.18	2	15	2	99	0.00	0.0	2.916	0	0	0	0	0	1	1	L	
L	CO22201	CO22110	ABC	1/0CU	6.99Y	116.5	0.01	9.53	258.33	83	5344	882	99	0.53	0.0	2.824	0	0	0	0	0	0	1076	L	
C	CO21961	CO22201	ABC	2ACSR	7.47Y	124.5	0.04	1.47	227.80	127	5047	788	99	1.67	0.0	3.372	0	0	0	0	0	0	1033	C	
C	CO1199609290	CO21961	ABC	2ACSR	7.46Y	124.3	0.21	1.68	224.29	125	4967	779	99	7.75	0.2	3.409	0	0	0	0	0	0	1001	C	
P	CO21568	CO21567	B	1/OPRIURD	7.26Y	121.1	0.00	4.95	-0.01	0	0	0	100	0.00	0.0	5.328	0	0	0	0	0	0	0	P	
L	CO21362	CO825810416	A	6HDCU	7.02Y	117.0	0.06	9.01	4.24	3	30	3	100	0.01	0.0	9.363	0	0	0	0	0	0	5	L	
L	CO21392	CO21362	A	4ACSR	7.02Y	117.0	0.01	9.03	1.45	1	10	1	100	0.00	0.0	9.599	0	0	0	0	0	4	4	L	
L	CO21526	CO213																							

Balanced Voltage Drop Report
Source: RECTORVILLE SUB

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L CO28155	CO28154	A	4ACSR	6.99Y	116.5	0.00	9.51	0.00	0	0	0	100	0.00	0.0	10.251	0	0	0	1	1	L
L CO28151	CO28157	A	4ACSR	6.99Y	116.5	0.00	9.52	1.78	1	12	1	100	0.00	0.0	10.080	0	0	0	3	4	L
L CO28152	CO28151	A	4ACSR	6.99Y	116.5	0.01	9.53	1.78	1	12	1	100	0.00	0.0	10.192	0	0	0	0	1	L
L CO28150	CO28152	A	4ACSR	6.99Y	116.5	0.01	9.53	1.78	1	12	1	100	0.00	0.0	10.275	0	0	0	0	1	L
L CO30529	CO28150	A	4ACSR	6.99Y	116.5	0.01	9.54	1.78	1	12	1	100	0.00	0.0	10.393	0	0	0	1	1	L
L CO28064	CO28147	A	4ACSR	6.99Y	116.5	0.00	9.51	1.33	1	9	1	99	0.00	0.0	9.979	0	0	0	0	0	L
L CO28029	CO28028	A	6HDCU	6.99Y	116.5	0.05	9.48	3.24	2	23	2	100	0.01	0.0	10.002	0	0	0	0	9	L
L CO28143	CO28029	A	4ACSR	6.99Y	116.5	0.00	9.48	1.93	1	13	1	100	0.00	0.0	10.032	0	0	0	0	6	L
L CO28144	CO28143	A	4ACSR	6.99Y	116.5	0.00	9.48	0.00	0	0	0	100	0.00	0.0	10.114	0	0	0	2	3	L
L CO28145	CO28144	A	4ACSR	6.99Y	116.5	0.00	9.48	0.00	0	0	0	100	0.00	0.0	10.144	0	0	0	0	1	L
L CO28142	CO28145	A	4ACSR	6.99Y	116.5	0.00	9.48	0.00	0	0	0	100	0.00	0.0	10.322	0	0	0	1	1	L
L CO28065	CO28143	A	4ACSR	6.99Y	116.5	0.00	9.48	1.93	1	13	1	100	0.00	0.0	10.055	0	0	0	2	3	L
L CO645856943	CO28065	A	4ACSR	6.99Y	116.5	0.00	9.48	0.00	0	0	0	100	0.00	0.0	10.114	0	0	0	1	1	L
L CO28197	CO28029	A	6HDCU	6.99Y	116.5	0.00	9.48	1.31	1	9	1	99	0.00	0.0	10.009	0	0	0	0	3	L
L OC864	CO28197	A	10 H OCR	6.99Y	116.5	0.00	9.48	1.31	13	9	1	99	0.00	0.0	10.009	0	0	0	0	3	L
L CO28198	OC864	A	6HDCU	6.99Y	116.5	0.01	9.49	1.31	1	9	1	99	0.00	0.0	10.109	0	0	0	0	3	L
L CO28201	CO28198	A	6HDCU	6.99Y	116.5	0.00	9.49	0.00	0	0	0	100	0.00	0.0	10.135	0	0	0	2	2	L
L CO28200	CO28201	A	6HDCU	6.99Y	116.5	0.00	9.49	0.00	0	0	0	100	0.00	0.0	10.140	0	0	0	0	0	L
L CO28058	CO28198	A	4ACSR	6.99Y	116.5	0.01	9.49	1.02	1	7	1	99	0.00	0.0	10.298	0	0	0	1	1	L
L CO28025	CO28024	A	4ACSR	6.99Y	116.4	0.18	9.55	8.70	6	61	6	100	0.09	0.1	10.002	0	0	0	0	14	L
L SW-824106434-B	CO28025	A	Closed	6.99Y	116.4	0.00	9.55	8.70	0	60	6	100	0.00	0.0	10.002	0	0	0	0	14	L
L SW-824106434-A	SW-824106434-B	A	Closed	6.99Y	116.4	0.00	9.55	8.70	0	60	6	100	0.00	0.0	10.002	0	0	0	0	14	L
L CO28026	SW-824106434-A	A	6HDCU	6.98Y	116.4	0.05	9.61	8.70	7	60	6	100	0.03	0.0	10.144	0	0	0	0	14	L
L CO28056	CO28026	A	4ACSR	6.98Y	116.4	0.00	9.61	1.00	1	7	1	99	0.00	0.0	10.203	0	0	0	4	4	L
L CO28027	CO28026	A	6HDCU	6.98Y	116.4	0.02	9.63	7.70	6	54	5	100	0.01	0.0	10.215	0	0	0	0	10	L
L CO28055	CO28027	A	2ACSR	6.98Y	116.4	0.00	9.63	1.69	1	12	1	100	0.00	0.0	10.300	0	0	0	1	2	L
L CO577135783	CO28055	A	2ACSR	6.98Y	116.4	0.00	9.63	0.00	0	0	0	100	0.00	0.0	10.423	0	0	0	1	1	L
L CO1608195401	CO28055	A	2ACSR	6.98Y	116.4	0.00	9.63	0.00	0	0	0	100	0.00	0.0	10.381	0	0	0	0	0	L
L CO28167	CO28027	A	4ACSR	6.98Y	116.4	0.01	9.64	6.01	4	42	4	100	0.00	0.0	10.251	0	0	0	1	8	L
L CO28168	CO28167	A	4ACSR	6.98Y	116.3	0.01	9.65	4.90	4	34	3	100	0.00	0.0	10.316	0	0	0	2	7	L
L CO28166	CO28168	A	4ACSR	6.98Y	116.3	0.01	9.67	4.37	3	30	3	100	0.00	0.0	10.393	0	0	0	3	5	L
L CO28165	CO28166	A	4ACSR	6.98Y	116.3	0.01	9.67	1.65	1	11	1	100	0.00	0.0	10.464	0	0	0	1	2	L
L CO28164	CO28165	A	4ACSR	6.98Y	116.3	0.00	9.67	0.00	0	0	0	100	0.00	0.0	10.582	0	0	0	0	1	L
L CO28068	CO28164	A	2ACSR	6.98Y	116.3	0.00	9.67	0.00	0	0	0	100	0.00	0.0	10.613	0	0	0	1	1	L
L CO28054	SW-824106434-A	A	4ACSR	6.99Y	116.4	0.00	9.55	0.00	0	0	0	100	0.00	0.0	10.061	0	0	0	0	0	L
L CO28053	CO30528	A	4ACSR	7.01Y	116.9	0.00	9.12	0.03	0	0	0	100	0.00	0.0	9.280	0	0	0	1	1	L
L CO30701	ABC	1/OCU		6.99Y	116.5	0.00	9.52	0.00	0	0	0	100	0.00	0.0	2.887	0	0	0	3	3	L
P UD200649001	CO28367	C	1/OPRIURD	7.17Y	119.5	0.00	6.47	-0.05	0	0	0	100	0.00	0.0	4.177	0	0	0	0	0	P
P UD200649002	UD200649001	C	1/OPRIURD	7.17Y	119.5	0.00	6.47	-0.04	0	0	0	100	0.00	0.0	4.238	0	0	0	0	0	P

----- Feeder No. 0 (Owl Hollow) Beginning with Device OC674 -----

L CO22750	CO22749	C	4ACSR	7.02Y	116.9	0.12	9.08	41.78	30	269	117	92	0.27	0.1	4.996	0	0	0	0	63	L
L CO22775	CO22750	C	4ACSR	7.01Y	116.9	0.02	9.10	4.74	3	30	13	92	0.00	0.0	5.081	0	0	0	5	5	L
L CO22837	CO22750	C	4ACSR	7.01Y	116.9	0.03	9.11	37.04	26	238	104	92	0.06	0.0	5.013	0	0	0	1	58	L
L CO22836	CO22837	C	4ACSR	6.99Y	116.5	0.36	9.47	35.99	26	231	101	92	0.68	0.3	5.223	0	0	0	0	57	L
L CO22751	CO22836	C	4ACSR	6.99Y	116.4	0.11	9.58	33.45	24	214	94	92	0.19	0.1	5.292	0	0	0	0	54	L
L CO22777	CO22751	C	4ACSR	6.99Y	116.4	0.00	9.58	0.00	0	0	0	100	0.00	0.0	5.400	0	0	0	0	0	L
L CO22752	CO22751	C	4ACSR	6.97Y	116.2	0.27	9.85	33.45	24	214	93	92	0.47	0.2	5.463	0	0	0	0	54	L
L CO22839	CO22752	C	4ACSR	6.96Y	116.1	0.07	9.92	11.34	8	72	32	91	0.04	0.1	5.591	0	0	0	1	18	L
L CO22838	CO22839	C	4ACSR	6.96Y	116.1	0.02	9.94	10.90	8	70	30	92	0.01	0.0	5.633	0	0	0	0	17	L
L CO22841	CO22838	C	4ACSR	6.96Y	116.0	0.03	9.97	10.11	7	65	28	92	0.02	0.0	5.704	0	0	0	1	15	L
L CO22840	CO22841	C	4ACSR	6.96Y	115.9	0.09	10.06	8.94	6	57	25	92	0.04	0.1	5.917	0	0	0	0	14	L
L CO22753	CO22840	C	4ACSR	6.94Y	115.7	0.22	10.29	7.53	5	48	21	92	0.09	0.2	6.543	0	0	0	1	11	L
L CO22843	CO22753	C	4ACSR	6.94Y	115.7	0.00	10.29	0.00	0	0	0	100	0.00	0.0	6.884	0	0	0	0	0	L
L CO22842	CO22843	C	4ACSR	6.94Y	115.7	0.00	10.29	0.00	0	0	0	100	0.00	0.0	7.055	0	0	0	0	0	L
L CO22844	CO22842	C	4ACSR	6.94Y	115.7	0.00	10.29	0.00	0	0	0	100	0.00	0.0	7.213	0	0	0	0	0	L
L CO22754	CO22753	C	4ACSR	6.94Y	115.6	0.07	10.36	7.53	5	48	21	92	0.03	0.1	6.751	0	0	0	0	10	L
L CO22780	CO22754	C	4ACSR	6.94Y	115.6	0.04	10.41	4.78	3	30	13	92	0.01	0.0	6.941	0	0	0	2	2	L
L CO22869	CO22754	C	4ACSR	6.94Y	115.6	0.01	10.38	2.75	2	18	8	91	0.00	0.0	6.846	0	0	0	2	8	L
L CO22870	CO22869	C	4ACSR	6.94Y	115.6	0.01	10.39	2.75	2	18	8	91	0.00	0.0	6.922	0	0	0	2	6	L
L CO22868	CO22870	C	4ACSR	6.94Y	115.6	0.00	10.39	0.71	1	5	2	93	0.00	0.0	6.973	0	0	0	1	4	L
L CO22867	CO22868	C	4ACSR	6.94Y	115.6	0.00	10.39	0.71	1	5	2	93	0.00	0.0	7.036	0	0	0	2	3	L
L CO22871	CO22867	C	4ACSR	6.94Y	115.6	0.00	10.39	0.71	1	5	2	93	0.00	0.0	7.111	0	0	0	1	1	L
L CO22779	CO22840	C	4ACSR	6.96Y	115.9	0.01	10.07	1.40	1	9	4	91	0.00	0.0	6.012	0	0	0	3	3	L
L CO22778	CO22838	C	4ACSR	6.96Y	116.1	0.00	9.94	0.79	1	5	2	93	0.00	0.0	5.718	0	0	0	2	2	L
L CO22755	CO22752	C	4ACSR	6.96Y	116.1	0.10	9.95	22.11	16	141	62	92	0.11	0.1	5.557	0	0	0	0	36	L
L CO22845	CO22755	C	4ACSR	6.96Y	116.0	0.02	9.97	20.33	15	130	57	92	0.02	0.0	5.579	0	0	0	2	34	L
L CO22847	CO22845	C	4ACSR	6.96Y	116.0	0.03	9.99	16.89	12	108	47	92	0.02	0.0	5.611	0	0	0	1	32	L
L CO22846	CO22847	C	4ACSR																		

Balanced Voltage Drop Report
Source: RECTORVILLE SUB

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	-----Element----- Length (mi)	KW	KVAR	Cons On	Cons Thru	
L CO22876	CO22877	C	4/OACSR	6.92Y	115.4	0.00	10.61	0.32	0	2	1	89	0.00	0.0	6.596	0	0	0	2	2	L
L CO22786	CO22877	C	4/OACSR	6.92Y	115.4	0.00	10.61	0.76	0	5	2	93	0.00	0.0	6.633	0	0	0	1	1	L
L CO23698	CO22756	C	4ACSR	6.91Y	115.2	0.16	10.77	12.89	9	82	36	92	0.11	0.1	6.699	0	0	0	0	23	L
L CO22553	CO23698	C	4ACSR	6.91Y	115.1	0.10	10.87	11.01	8	70	30	92	0.06	0.1	6.895	0	0	0	0	17	L
L CO22554	CO22553	C	4ACSR	6.90Y	115.1	0.07	10.94	8.06	6	51	22	92	0.03	0.1	7.071	0	0	0	0	11	L
L CO22575	CO22554	C	4ACSR	6.90Y	115.1	0.00	10.94	0.00	0	0	0	100	0.00	0.0	7.128	0	0	0	3	3	L
L CO22576	CO22554	C	4ACSR	6.90Y	115.1	0.00	10.94	1.36	1	9	4	91	0.00	0.0	7.128	0	0	0	1	1	L
L CO22714	CO22554	C	4ACSR	6.90Y	115.0	0.01	10.95	6.70	5	42	18	92	0.00	0.0	7.111	0	0	0	0	7	L
L CO22715	CO22714	C	4ACSR	6.90Y	115.0	0.04	10.99	6.70	5	42	18	92	0.02	0.0	7.246	0	0	0	1	7	L
L CO22713	CO22713	C	4ACSR	6.90Y	115.0	0.01	11.00	3.55	3	22	10	91	0.00	0.0	7.287	0	0	0	0	6	L
L CO22555	CO22713	C	4ACSR	6.90Y	115.0	0.02	11.02	3.55	3	22	10	91	0.00	0.0	7.401	0	0	0	1	6	L
L CO22711	CO22555	C	4ACSR	6.90Y	115.0	0.01	11.02	3.55	3	22	10	91	0.00	0.0	7.434	0	0	0	0	4	L
L CO22712	CO22711	C	4ACSR	6.90Y	115.0	0.02	11.04	3.55	3	22	10	91	0.00	0.0	7.548	0	0	0	0	4	L
L CO22578	CO22712	C	4ACSR	6.90Y	115.0	0.00	11.05	0.83	1	5	2	93	0.00	0.0	7.608	0	0	0	1	1	L
L CO-928653193	CO22712	C	2ACSR	6.90Y	114.9	0.01	11.06	2.72	2	17	7	92	0.00	0.0	7.702	0	0	0	0	3	L
L CO-243526851	CO-928653193	C	2ACSR	6.90Y	114.9	0.00	11.06	0.70	0	4	2	89	0.00	0.0	7.795	0	0	0	0	2	L
L CO21890	CO-243526851	C	4ACSR	6.90Y	114.9	0.01	11.07	0.70	1	4	2	89	0.00	0.0	7.976	0	0	0	1	2	L
L CO21891	CO21890	C	4ACSR	6.90Y	114.9	0.00	11.07	0.00	0	0	0	100	0.00	0.0	8.057	0	0	0	1	1	L
L CO21892	CO21891	C	4ACSR	6.90Y	114.9	0.00	11.07	0.00	0	0	0	100	0.00	0.0	8.130	0	0	0	0	0	L
L CO-845775053	CO-928653193	C	2ACSR	6.90Y	114.9	0.00	11.06	2.02	1	13	6	91	0.00	0.0	7.740	0	0	0	1	1	L
L CO22577	CO22555	C	4ACSR	6.90Y	115.0	0.00	11.02	0.00	0	0	0	100	0.00	0.0	7.519	0	0	0	1	1	L
L CO22556	CO22553	C	4ACSR	6.91Y	115.1	0.01	10.88	2.95	2	19	8	92	0.00	0.0	6.952	0	0	0	0	6	L
L CO22574	CO22556	C	4ACSR	6.91Y	115.1	0.00	10.88	0.22	0	1	1	71	0.00	0.0	6.990	0	0	0	2	2	L
L CO22727	CO22556	C	4ACSR	6.91Y	115.1	0.00	10.88	2.73	2	17	8	90	0.00	0.0	6.959	0	0	0	0	4	L
L OC684	CO22727	C	15 H OCR	6.91Y	115.1	0.00	10.88	2.73	18	17	8	90	0.00	0.0	6.959	0	0	0	0	4	L
L CO22728	OC684	C	4ACSR	6.91Y	115.1	0.01	10.89	2.73	2	17	8	90	0.00	0.0	7.045	0	0	0	1	4	L
L CO22718	CO22728	C	4ACSR	6.91Y	115.1	0.02	10.91	2.73	2	17	8	90	0.00	0.0	7.179	0	0	0	0	3	L
L CO22719	CO22718	C	4ACSR	6.90Y	115.0	0.05	10.95	2.73	2	17	8	90	0.01	0.0	7.530	0	0	0	0	3	L
L CO22720	CO22719	C	4ACSR	6.90Y	115.0	0.00	10.96	2.73	2	17	8	90	0.00	0.0	7.567	0	0	0	0	3	L
L CO22721	CO22720	C	4ACSR	6.90Y	115.0	0.01	10.97	2.73	2	17	8	90	0.00	0.0	7.672	0	0	0	0	3	L
L CO22722	CO22721	C	4ACSR	6.90Y	115.0	0.01	10.98	2.73	2	17	8	90	0.00	0.0	7.719	0	0	0	1	3	L
L CO22723	CO22722	C	4ACSR	6.90Y	115.0	0.01	10.98	1.28	1	8	4	89	0.00	0.0	7.837	0	0	0	0	1	L
L CO22724	CO22723	C	4ACSR	6.90Y	115.0	0.01	10.99	1.28	1	8	4	89	0.00	0.0	7.956	0	0	0	1	1	L
L CO22573	CO22722	C	4ACSR	6.90Y	115.0	0.00	10.98	0.00	0	0	0	100	0.00	0.0	7.766	0	0	0	1	1	L
L CO22716	CO23698	C	4ACSR	6.91Y	115.2	0.01	10.78	1.89	1	12	5	92	0.00	0.0	6.846	0	0	0	4	6	L
L CO22717	CO22716	C	4ACSR	6.91Y	115.2	0.00	10.78	0.76	1	5	2	93	0.00	0.0	6.916	0	0	0	2	2	L
L CO22874	CO22848	C	4ACSR	6.94Y	115.7	0.00	10.28	0.97	1	6	3	89	0.00	0.0	6.063	0	0	0	1	2	L
L CO22875	CO22874	C	4ACSR	6.94Y	115.7	0.00	10.28	0.97	1	6	3	89	0.00	0.0	6.139	0	0	0	1	1	L
L CO22873	CO22846	C	4ACSR	6.95Y	115.9	0.00	10.13	0.72	1	5	2	93	0.00	0.0	5.864	0	0	0	0	2	L
L CO22872	CO22873	C	4ACSR	6.95Y	115.9	0.00	10.13	0.00	0	0	0	100	0.00	0.0	5.949	0	0	0	1	1	L
L CO22783	CO22873	C	4ACSR	6.95Y	115.9	0.00	10.13	0.72	1	5	2	93	0.00	0.0	5.911	0	0	0	1	1	L
L CO22781	CO22755	C	4ACSR	6.96Y	116.1	0.00	9.95	0.29	0	2	1	89	0.00	0.0	5.614	0	0	0	1	1	L
L CO22782	CO22755	C	4ACSR	6.96Y	116.0	0.01	9.96	1.50	1	10	4	93	0.00	0.0	5.652	0	0	0	1	1	L
L CO22776	CO22836	C	4ACSR	6.99Y	116.5	0.01	9.48	2.54	2	16	7	92	0.00	0.0	5.324	0	0	0	3	3	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total		
KW	15392	131	0	0	0	0	789	0.00	16312	Lowest Voltage = 114.93	on Element CO21890
KVAR	2527	13	-104	-20	0	0	1569		3984	Max Accm VoltD = 11.07	on Element CO21890
										Max Elem VoltD = 9.53	on Element RG13

Balanced Voltage Drop Report

Source: OAK RIDGE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																			
-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru
OAK RIDGE		ABC	OAK RIDGE	15.12Y	126.0	0.00	0.00	197.69	0	8852	1432	99	0.00	0.0	0.000	0	0	0	2162
----- Feeder No. 0 (Burtonville) Beginning with Device OC-1594071829 -----																			
----- Feeder No. 0 (Mud Lick) Beginning with Device OC-1938734248 -----																			
L CO8039	CO15554	C	4ACSR	7.02Y	117.0	0.23	9.01	44.12	32	308	36	99	0.58	0.2	13.668	0	0	0	1 92 L
L CO8135	CO8039	C	4ACSR	7.02Y	117.0	0.02	9.03	43.96	31	306	36	99	0.05	0.0	13.679	0	0	0	0 91 L
L CO8134	CO8135	C	4ACSR	7.02Y	116.9	0.02	9.05	43.96	31	306	36	99	0.05	0.0	13.689	0	0	0	1 91 L
L CO8038	CO8134	C	4ACSR	7.00Y	116.7	0.25	9.30	43.92	31	306	36	99	0.62	0.2	13.820	0	0	0	0 90 L
L CO7950	CO8038	C	4ACSR	6.98Y	116.3	0.40	9.70	41.71	30	290	33	99	0.94	0.3	14.037	0	0	0	0 86 L
L CO8162	CO7950	C	4ACSR	6.98Y	116.3	0.01	9.71	41.14	29	285	32	99	0.03	0.0	14.044	0	0	0	0 84 L
L OC211	CO8162	C	50 L OCR	6.98Y	116.3	0.00	9.71	41.14	82	285	32	99	0.00	0.0	14.044	0	0	0	0 84 L
L CO8163	OC211	C	4ACSR	6.97Y	116.1	0.18	9.89	41.14	29	285	32	99	0.41	0.1	14.142	0	0	0	2 84 L
L CO7949	CO8163	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	14.350	0	0	0	0 3 L
L CO7951	CO7949	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	14.577	0	0	0	0 1 L
L CO8172	CO7951	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	15.053	0	0	0	0 0 L
L CO8173	CO8172	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	15.060	0	0	0	0 0 L
L CO7977	CO7951	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	14.634	0	0	0	1 1 L
L CO7978	CO7949	C	4ACSR	6.97Y	116.1	0.00	9.89	0.00	0	0	0	100	0.00	0.0	14.463	0	0	0	2 2 L
L CO7955	CO8163	C	4ACSR	6.96Y	115.9	0.17	10.06	39.99	29	277	31	99	0.38	0.1	14.236	0	0	0	1 79 L
L CO8036	CO7955	C	4ACSR	6.96Y	115.9	0.00	10.06	0.00	0	0	0	100	0.00	0.0	14.347	0	0	0	0 0 L
L CO8094	CO7955	C	4ACSR	6.95Y	115.8	0.13	10.19	38.79	28	268	30	99	0.29	0.1	14.314	0	0	0	0 78 L
L CO8179	CO8094	C	4ACSR	6.95Y	115.8	0.00	10.19	2.90	2	20	2	100	0.00	0.0	14.350	0	0	0	1 4 L
L CO35628334	CO8179	C	2ACSR	6.95Y	115.8	0.00	10.20	1.43	1	10	1	100	0.00	0.0	14.426	0	0	0	0 3 L
L CO-1271174837	CO35628334	C	2ACSR	6.95Y	115.8	0.00	10.20	1.37	1	9	1	99	0.00	0.0	14.458	0	0	0	1 1 L
L CO-2144764976	CO35628334	C	2ACSR	6.95Y	115.8	0.00	10.20	0.03	0	0	0	100	0.00	0.0	14.574	0	0	0	2 2 L
L CO7979	CO8094	C	4ACSR	6.94Y	115.7	0.12	10.31	35.89	26	248	27	99	0.24	0.1	14.391	0	0	0	1 74 L
L CO8037	CO7979	C	4ACSR	6.93Y	115.4	0.27	10.58	35.85	26	247	27	99	0.54	0.2	14.561	0	0	0	1 73 L
L CO8031	CO8037	C	4ACSR	6.92Y	115.3	0.17	10.74	35.37	25	243	26	99	0.34	0.1	14.670	0	0	0	2 72 L
L CO8032	CO8031	C	4ACSR	6.91Y	115.2	0.01	10.75	2.70	2	19	2	99	0.00	0.0	14.757	0	0	0	2 2 L
L CO-1381611796	CO8032	C	2ACSR	6.91Y	115.2	0.00	10.76	2.70	1	19	2	99	0.00	0.0	14.764	0	0	0	0 0 L
L CO733768068	CO-1381611796	C	2ACSR	6.91Y	115.2	0.00	10.76	2.70	1	19	2	99	0.00	0.0	14.807	0	0	0	0 0 L
L OH270542001	CO733768068	C	2ACSR	6.91Y	115.2	0.00	10.76	1.83	1	13	2	99	0.00	0.0	14.832	0	0	0	0 0 L
L OH270542002	OH270542001	C	2ACSR	6.91Y	115.2	0.00	10.76	1.83	1	13	2	99	0.00	0.0	14.852	0	0	0	0 0 L
L CO8033	CO8033	C	4ACSR	6.91Y	115.2	0.08	10.82	31.57	23	217	23	99	0.14	0.1	14.725	0	0	0	1 68 L
L CO7958	CO8033	C	4ACSR	6.91Y	115.2	0.00	10.82	1.24	1	8	1	99	0.00	0.0	14.793	0	0	0	0 4 L
L CO8040	CO7958	C	4ACSR	6.91Y	115.2	0.01	10.83	0.97	1	7	1	99	0.00	0.0	14.991	0	0	0	1 1 L
L CO8168	CO8040	C	4ACSR	6.91Y	115.2	0.00	10.83	0.00	0	0	0	100	0.00	0.0	15.097	0	0	0	0 0 L
L SW214-B	CO8168	C	Open	6.91Y	115.2	0.00	10.83	0.00	0	0	0	100	0.00	0.0	15.097	0	0	0	0 0 L
L CO8102	CO7958	C	4ACSR	6.91Y	115.2	0.00	10.82	0.27	0	2	0	100	0.00	0.0	14.854	0	0	0	2 3 L
L CO8101	CO8102	C	4ACSR	6.91Y	115.2	0.00	10.83	0.18	0	1	0	100	0.00	0.0	14.876	0	0	0	1 1 L
L CO8029	CO8033	C	4ACSR	6.91Y	115.1	0.05	10.87	29.98	21	206	22	99	0.08	0.0	14.762	0	0	0	1 63 L
L CO8030	CO8029	C	4ACSR	6.90Y	115.1	0.06	10.93	29.67	21	204	21	99	0.11	0.1	14.810	0	0	0	0 62 L
L CO7957	CO8030	C	4ACSR	6.89Y	114.9	0.18	11.11	25.29	18	174	18	99	0.26	0.2	14.977	0	0	0	0 52 L
L CO7954	CO7957	C	4ACSR	6.89Y	114.8	0.07	11.18	23.57	17	162	16	100	0.09	0.1	15.041	0	0	0	1 49 L
L CO7953	CO7954	C	4ACSR	6.89Y	114.8	0.05	11.23	20.99	15	144	14	100	0.06	0.0	15.098	0	0	0	0 47 L
L CO7982	CO7953	C	4ACSR	6.89Y	114.8	0.00	11.23	0.00	0	0	0	100	0.00	0.0	15.155	0	0	0	1 1 L
L CO8042	CO7953	C	4ACSR	6.88Y	114.7	0.05	11.28	20.99	15	144	14	100	0.06	0.0	15.155	0	0	0	1 46 L
L CO8043	CO8042	C	4ACSR	6.88Y	114.7	0.03	11.31	19.34	14	133	12	100	0.03	0.0	15.190	0	0	0	2 45 L
L CO8044	CO8043	C	4ACSR	6.88Y	114.7	0.03	11.34	18.65	13	128	12	100	0.03	0.0	15.222	0	0	0	1 43 L
L OH270543001	CO8044	C	4ACSR	6.88Y	114.7	0.00	11.34	0.00	0	0	0	100	0.00	0.0	15.297	0	0	0	0 0 L
L OH270543002	OH270543001	C	4ACSR	6.88Y	114.7	0.00	11.34	0.00	0	0	0	100	0.00	0.0	15.419	0	0	0	0 0 L
L CO7952	CO8044	C	4ACSR	6.87Y	114.6	0.08	11.42	17.70	13	121	11	100	0.08	0.1	15.326	0	0	0	0 40 L
L CO7983	CO7952	C	4ACSR	6.87Y	114.6	0.00	11.42	0.82	1	6	1	99	0.00	0.0	15.402	0	0	0	2 2 L
L CO8046	CO7952	C	4ACSR	6.87Y	114.5	0.04	11.46	16.88	12	116	10	100	0.04	0.0	15.380	0	0	0	1 38 L
L CO8144	CO8046	C	4ACSR	6.87Y	114.5	0.08	11.54	16.51	12	113	10	100	0.07	0.1	15.487	0	0	0	0 37 L
L CO8143	CO8144	C	4ACSR	6.87Y	114.4	0.03	11.57	16.51	12	113	10	100	0.03	0.0	15.528	0	0	0	0 37 L
L CO21124490	CO8143	C	2ACSR	6.87Y	114.4	0.00	11.57	0.76	0	5	1	98	0.00	0.0	15.607	0	0	0	2 2 L
L CO8060	CO8143	C	4ACSR	6.86Y	114.4	0.02	11.59	15.75	11	108	9	100	0.02	0.0	15.558	0	0	0	1 31 L
L CO8061	CO8060	C	2ACSR	6.86Y	114.3	0.08	11.66	14.71	8	101	8	100	0.06	0.1	15.739	0	0	0	0 30 L
L CO-262812970	CO8061	C	2ACSR	6.86Y	114.3	0.00	11.67	0.92	1	6	1	99	0.00	0.0	15.836	0	0	0	1 1 L
L CO1519603447	CO8061	C	2ACSR	6.86Y	114.3	0.02	11.68	13.79	8	94	7	100	0.02	0.0	15.790	0	0	0	0 29 L
L CO8176	CO1519603447	C	4ACSR	6.84Y	114.0	0.31	11.99	12.96	9	89	7	100	0.23	0.3	16.340	0	0	0	1 26 L
L CO7967	CO8176	C	4ACSR	6.84Y	114.0	0.05	12.04	4.34	3	29	4	99	0.01	0.0	16.613	0	0	0	0 10 L
L CO8009	CO7967	C	4ACSR	6.84Y	114.0	0.00	12.04	0.00	0	0	0	100	0.00	0.0	16.738	0			

Balanced Voltage Drop Report
Source: OAK RIDGE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L CO8180	CO8176	C	4ACSR	6.83Y	113.8	0.17	12.16	8.63	6	59	3	100	0.08	0.1	16.795	0	0	0	1	15	L
L CO8177	CO8180	C	4ACSR	6.83Y	113.8	0.08	12.23	8.63	6	59	3	100	0.04	0.1	17.003	0	0	0	0	14	L
L CO8079	CO8177	C	4ACSR	6.82Y	113.7	0.02	12.26	8.63	6	59	3	100	0.01	0.0	17.063	0	0	0	0	14	L
L CO8150	CO8079	C	4ACSR	6.82Y	113.7	0.03	12.28	3.07	2	21	3	99	0.00	0.0	17.271	0	0	0	0	3	L
L CO8152	CO8150	C	4ACSR	6.82Y	113.7	0.00	12.29	3.07	2	21	3	99	0.00	0.0	17.300	0	0	0	0	3	L
L CO8151	CO8152	C	4ACSR	6.82Y	113.7	0.00	12.29	3.07	2	21	3	99	0.00	0.0	17.319	0	0	0	2	3	L
L CO8059	CO8151	C	4ACSR	6.82Y	113.7	0.00	12.29	0.28	0	2	0	100	0.00	0.0	17.394	0	0	0	1	1	L
L CO8178	CO8079	C	4ACSR	6.82Y	113.7	0.04	12.30	5.57	4	38	0	100	0.01	0.0	17.254	0	0	0	0	11	L
L CO8064	CO8178	C	4ACSR	6.82Y	113.7	0.01	12.31	5.31	4	36	0	100	0.00	0.0	17.289	0	0	0	1	11	L
L CO8014	CO8064	C	1/OPRIURD	6.82Y	113.7	0.00	12.31	5.31	4	36	0	100	0.00	0.0	17.333	0	0	0	0	10	L
L CO8155	CO8014	C	1/OPRIURD	6.82Y	113.7	0.01	12.32	5.31	4	36	0	100	0.00	0.0	17.410	0	0	0	0	10	L
L CO8153	CO8155	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	1.86	1	13	1	100	0.00	0.0	17.421	0	0	0	1	2	L
L UD270553001	CO8153	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.12	0	0	-1	0	0.00	0.0	17.461	0	0	0	0	1	L
L CO8154	UD270553001	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.02	0	0	0	100	0.00	0.0	17.470	0	0	0	0	0	L
L CO8015	CO8154	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.02	0	0	0	100	0.00	0.0	17.497	0	0	0	0	0	L
L CO8016	UD270553001	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.08	0	0	-1	0	0.00	0.0	17.514	0	0	0	1	1	L
L CO8017	CO8016	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.05	0	0	0	100	0.00	0.0	17.553	0	0	0	0	0	L
L CO8018	CO8017	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	-0.02	0	0	0	100	0.00	0.0	17.590	0	0	0	0	0	L
L CO8156	CO8155	C	1/OPRIURD	6.82Y	113.7	0.00	12.32	3.45	2	24	0	100	0.00	0.0	17.465	0	0	0	3	8	L
L CO8019	CO8156	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	2.81	2	19	0	100	0.00	0.0	17.508	0	0	0	1	5	L
L CO8020	CO8019	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	1.88	1	13	-1	-100	0.00	0.0	17.559	0	0	0	0	4	L
L CO8157	CO8020	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.12	0	1	-1	-71	0.00	0.0	17.618	0	0	0	0	1	L
L CO8028	CO8157	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.10	0	1	0	100	0.00	0.0	17.667	0	0	0	0	1	L
L CO30705	CO8028	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.01	0	0	0	100	0.00	0.0	17.684	0	0	0	0	0	L
L CO1933466034	CO8028	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.09	0	1	0	100	0.00	0.0	17.695	0	0	0	1	1	L
L CO8158	CO8020	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	1.79	1	12	0	100	0.00	0.0	17.608	0	0	0	1	2	L
L CO8021	CO8158	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	1.50	1	10	0	100	0.00	0.0	17.678	0	0	0	1	1	L
L CO8159	CO8021	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.95	1	6	0	100	0.00	0.0	17.724	0	0	0	0	0	L
L CO8160	CO8159	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.95	1	6	0	100	0.00	0.0	17.745	0	0	0	0	0	L
L UD270553003	CO8160	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.42	0	3	0	100	0.00	0.0	17.757	0	0	0	0	0	L
L UD270553002	UD270553003	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	0.33	0	2	0	100	0.00	0.0	17.790	0	0	0	0	0	L
L CO8026	UD270553002	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.02	0	0	0	100	0.00	0.0	17.826	0	0	0	0	0	L
L CO8022	CO8159	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.06	0	0	0	100	0.00	0.0	17.747	0	0	0	0	0	L
L CO8023	CO8022	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.05	0	0	0	100	0.00	0.0	17.792	0	0	0	0	0	L
L CO8024	CO8023	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.02	0	0	0	100	0.00	0.0	17.829	0	0	0	0	0	L
L CO8012	CO8020	C	1/OPRIURD	6.82Y	113.7	0.00	12.33	-0.03	0	0	0	100	0.00	0.0	17.613	0	0	0	1	1	L
L CO8099	CO1519603447	C	4ACSR	6.86Y	114.3	0.00	11.68	0.82	1	6	1	99	0.00	0.0	15.819	0	0	0	1	3	L
L CO7997	CO8099	C	4ACSR	6.86Y	114.3	0.00	11.69	0.17	0	1	0	100	0.00	0.0	15.998	0	0	0	1	1	L
L CO8100	CO8099	C	4ACSR	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	15.857	0	0	0	1	1	L
L CO8063	CO8143	C	4ACSR	6.87Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	15.812	0	0	0	1	2	L
L CO8062	CO8063	C	4ACSR	6.87Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	15.963	0	0	0	1	1	L
L CO8109	CO8143	C	4ACSR	6.87Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	15.636	0	0	0	0	2	L
L CO8110	CO8109	C	4ACSR	6.87Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	15.729	0	0	0	2	2	L
L CO8096	CO8044	C	4ACSR	6.88Y	114.7	0.00	11.34	0.33	0	2	0	100	0.00	0.0	15.298	0	0	0	0	2	L
L CO8095	CO8096	C	4ACSR	6.88Y	114.7	0.00	11.34	0.33	0	2	0	100	0.00	0.0	15.331	0	0	0	2	2	L
L CO7981	CO7954	C	4ACSR	6.89Y	114.8	0.00	11.19	1.08	1	7	1	99	0.00	0.0	15.145	0	0	0	1	1	L
L CO8097	CO7957	C	4ACSR	6.89Y	114.9	0.01	11.12	1.73	1	12	1	100	0.00	0.0	15.071	0	0	0	2	3	L
L CO8098	CO8097	C	4ACSR	6.89Y	114.9	0.00	11.12	0.36	0	2	0	100	0.00	0.0	15.106	0	0	0	1	1	L
L CO7985	CO8030	C	4ACSR	6.90Y	115.1	0.00	10.94	3.04	2	21	3	99	0.00	0.0	14.841	0	0	0	3	4	L
L CO7987	CO7985	C	4ACSR	6.90Y	115.1	0.01	10.94	1.79	1	12	2	99	0.00	0.0	14.909	0	0	0	1	1	L
L CO7986	CO8030	C	4ACSR	6.90Y	115.1	0.00	10.93	1.33	1	9	1	99	0.00	0.0	14.841	0	0	0	1	6	L
L CO8011	CO7986	C	2ACSR	6.90Y	115.1	0.00	10.94	1.14	1	8	1	99	0.00	0.0	14.920	0	0	0	5	5	L
L CO7980	CO7950	C	4ACSR	6.98Y	116.3	0.00	9.70	0.56	0	4	0	100	0.00	0.0	14.066	0	0	0	2	2	L
L CO8133	CO8038	C	4ACSR	7.00Y	116.7	0.00	9.31	2.21	2	15	2	99	0.00	0.0	13.839	0	0	0	0	4	L
L CO8132	CO8133	C	4ACSR	7.00Y	116.7	0.01	9.31	2.21	2	15	2	99	0.00	0.0	13.904	0	0	0	2	4	L
L CO8136	CO8132	C	4ACSR	7.00Y	116.7	0.00	9.31	1.22	1	9	1	99	0.00	0.0	13.918	0	0	0	0	2	L
L CO8138	CO8136	C	4ACSR	7.00Y	116.7	0.00	9.32	1.22	1	9	1	99	0.00	0.0	13.977	0	0	0	0	2	L
L CO8137	CO8138	C	4ACSR	7.00Y	116.7	0.01	9.32	1.22	1	9	1	99	0.00	0.0	14.101	0	0	0	1	2	L
L CO8139	CO8137	C	4ACSR	7.00Y	116.7	0.00	9.32	0.00	0	0	0	100	0.00	0.0	14.134	0	0	0	0	1	L
L CO8140	CO8139	C	4ACSR	7.00Y	116.7	0.00	9.32	0.00	0	0	0	100	0.00	0.0	14.175	0	0	0	1	1	L

----- Feeder No. 0 (Petersville) Beginning with Device OC-1614522594 -----

L CO7373	CO8375	A	4ACSR	7.02Y	117.0	0.61	9.03	45.19	32	318	20	100	1.60	0.5	5.892	0	0	0	0	48	L
L CO7309	CO7373	A	4ACSR	7.01Y	116.8	0.19	9.22	23.30	17	163	10	100	0.26	0.2	6.084	0	0	0	0	22	L
L CO7380	CO7309	A	4ACSR	7.01Y	116.8	0.00	9.22	0.00	0	0	0	100	0.00	0.0	6.136	0	0	0	0	1	L
L CO7381	CO7380	A	4ACSR	7.01Y	116.8	0.00	9.22	0.00	0	0	0	100	0.00	0.0	6.214	0	0	0	1	1	L
L CO7396	CO7309	A	4ACSR	7.01Y	116.8	0.02	9.24	3.95	3	28	2	100	0.00	0.0	6.199	0	0	0	1	8	L
L CO7397	CO7396	A	4ACSR	7.01Y	116.8	0.01	9.24	1.67	1	12	1	100	0.00	0.0	6.312	0	0	0	0	7	L
L CO7394	CO7397	A	4ACSR	7.00Y	116.7	0															

Balanced Voltage Drop Report
Source: OAK RIDGE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru	
L CO7827	CO8378	A	4ACSR	6.99Y	116.6	0.04	9.42	19.02	14	133	8	100	0.04	0.0	6.336	0	0	0	1	12	L
L CO7829	CO7827	A	4ACSR	6.99Y	116.4	0.15	9.57	17.71	13	124	7	100	0.16	0.1	6.537	0	0	0	1	11	L
L CO7828	CO7829	A	4ACSR	6.98Y	116.4	0.05	9.62	15.25	11	106	6	100	0.04	0.0	6.614	0	0	0	2	10	L
L CO7847	CO7828	A	4ACSR	6.97Y	116.2	0.20	9.82	14.54	10	101	6	100	0.17	0.2	6.936	0	0	0	0	6	L
L CO7844	CO7847	A	4ACSR	6.97Y	116.1	0.04	9.86	14.54	10	101	6	100	0.03	0.0	6.998	0	0	0	0	6	L
L CO7846	CO7844	A	4ACSR	6.96Y	116.1	0.08	9.94	14.54	10	101	6	100	0.07	0.1	7.130	0	0	0	0	6	L
L CO183995878	CO7846	A	2ACSR	6.96Y	116.1	0.00	9.95	2.60	1	18	1	100	0.00	0.0	7.160	0	0	0	1	1	L
L CO7845	CO7846	A	4ACSR	6.96Y	116.0	0.04	9.98	11.94	9	83	4	100	0.03	0.0	7.201	0	0	0	0	5	L
L CO7946	CO7845	A	4ACSR	6.96Y	116.0	0.01	10.00	6.09	4	42	2	100	0.01	0.0	7.258	0	0	0	0	3	L
L CO7933	CO7946	A	4ACSR	6.96Y	116.0	0.02	10.02	6.09	4	42	2	100	0.01	0.0	7.334	0	0	0	0	3	L
L CO7805	CO7845	A	4ACSR	6.96Y	116.0	0.01	9.99	5.85	4	41	2	100	0.00	0.0	7.230	0	0	0	1	2	L
L CO7823	CO7805	A	1/OPRIURD	6.96Y	116.0	0.00	9.99	3.06	2	21	1	100	0.00	0.0	7.291	0	0	0	1	1	L
L CO7918	CO7828	A	4ACSR	6.98Y	116.4	0.00	9.63	0.16	0	1	0	100	0.00	0.0	6.652	0	0	0	0	2	L
L CO7917	CO7918	A	4ACSR	6.98Y	116.4	0.00	9.63	0.16	0	1	0	100	0.00	0.0	6.747	0	0	0	2	2	L
L CO-1763450846	CO7373	A	2ACSR	7.01Y	116.9	0.10	9.12	21.89	12	153	9	100	0.12	0.1	6.046	0	0	0	0	26	L
L OC-88637280	CO-1763450846	A	15 H OCR	7.01Y	116.9	0.00	9.12	21.89	146	153	9	100	0.00	0.0	6.046	0	0	0	0	26	L
L CO781684917	OC-88637280	A	2ACSR	7.01Y	116.9	0.00	9.12	0.00	0	0	0	100	0.00	0.0	6.082	0	0	0	1	1	L
L CO-41078503	OC-88637280	A	2ACSR	7.01Y	116.8	0.08	9.21	21.89	12	153	9	100	0.11	0.1	6.180	0	0	0	0	25	L
L CO-1612884665	CO-41078503	A	2ACSR	7.00Y	116.7	0.10	9.31	21.89	12	153	9	100	0.13	0.1	6.345	0	0	0	0	25	L
L CO-251152504	CO-1612884665	A	2ACSR	7.00Y	116.6	0.09	9.40	21.89	12	153	9	100	0.11	0.1	6.483	0	0	0	0	25	L
L CO-1409394140	CO-251152504	A	2ACSR	6.99Y	116.6	0.04	9.44	21.89	12	153	9	100	0.05	0.0	6.546	0	0	0	0	25	L
L CO-1525207547	CO-1409394140	A	2ACSR	6.99Y	116.5	0.09	9.53	19.56	11	137	8	100	0.10	0.1	6.710	0	0	0	0	24	L
L CO7322	CO-1525207547	A	2ACSR	6.99Y	116.5	0.00	9.53	0.41	0	3	0	100	0.00	0.0	6.771	0	0	0	1	1	L
L CO7368	CO-1525207547	A	4ACSR	6.98Y	116.4	0.06	9.59	19.15	14	134	8	100	0.06	0.0	6.779	0	0	0	0	23	L
L CO7369	CO7368	A	4ACSR	6.98Y	116.4	0.05	9.64	19.15	14	134	8	100	0.06	0.0	6.844	0	0	0	0	22	L
L CO7421	CO7369	A	4ACSR	6.98Y	116.4	0.01	9.64	19.15	14	133	8	100	0.01	0.0	6.852	0	0	0	0	22	L
L CO7420	CO7421	A	4ACSR	6.98Y	116.3	0.01	9.66	19.15	14	133	8	100	0.01	0.0	6.868	0	0	0	1	22	L
L CO7370	CO7420	A	4ACSR	6.98Y	116.3	0.04	9.69	19.15	14	133	8	100	0.04	0.0	6.911	0	0	0	0	21	L
L CO7367	CO7370	A	4ACSR	6.97Y	116.2	0.11	9.80	18.12	13	126	7	100	0.11	0.1	7.049	0	0	0	1	21	L
L CO7371	CO7367	A	4ACSR	6.96Y	116.1	0.13	9.93	16.48	12	115	7	100	0.13	0.1	7.238	0	0	0	1	20	L
L CO7372	CO7371	A	4ACSR	6.96Y	116.0	0.03	9.97	16.05	11	112	6	100	0.03	0.0	7.286	0	0	0	2	19	L
L CO7366	CO7372	A	4ACSR	6.96Y	116.0	0.04	10.00	14.98	11	104	6	100	0.03	0.0	7.344	0	0	0	0	16	L
L CO7321	CO7366	A	4ACSR	6.96Y	116.0	0.01	10.01	2.40	2	17	1	100	0.00	0.0	7.406	0	0	0	1	1	L
L CO7325	CO7366	A	4ACSR	6.96Y	116.0	0.02	10.02	3.43	2	24	1	100	0.00	0.0	7.486	0	0	0	0	3	L
L CO7320	CO7325	A	4ACSR	6.96Y	116.0	0.01	10.03	2.74	2	19	1	100	0.00	0.0	7.538	0	0	0	1	1	L
L CO7326	CO7325	A	4ACSR	6.96Y	116.0	0.00	10.03	0.69	0	5	0	100	0.00	0.0	7.552	0	0	0	2	2	L
L CO7363	CO7366	A	4ACSR	6.96Y	116.0	0.04	10.04	9.15	7	64	4	100	0.02	0.0	7.439	0	0	0	0	12	L
L CO7364	CO7363	A	4ACSR	6.95Y	115.8	0.11	10.15	9.15	7	64	4	100	0.06	0.1	7.723	0	0	0	1	12	L
L CO7362	CO7364	A	4ACSR	6.95Y	115.8	0.01	10.16	6.06	4	42	2	100	0.00	0.0	7.777	0	0	0	0	11	L
L CO7319	CO7362	A	4ACSR	6.95Y	115.8	0.00	10.17	2.06	1	14	1	100	0.00	0.0	7.829	0	0	0	2	2	L
L CO7365	CO7362	A	4ACSR	6.95Y	115.8	0.02	10.18	4.00	3	28	2	100	0.00	0.0	7.868	0	0	0	0	9	L
L CO7415	CO7365	A	4ACSR	6.95Y	115.8	0.00	10.18	4.00	3	28	2	100	0.00	0.0	7.878	0	0	0	0	9	L
L CO7430	CO7415	A	4ACSR	6.95Y	115.8	0.03	10.21	4.00	3	28	2	100	0.01	0.0	8.063	0	0	0	2	9	L
L CO7329	CO7430	A	4ACSR	6.95Y	115.8	0.01	10.22	1.30	1	9	1	99	0.00	0.0	8.157	0	0	0	0	6	L
L CO7426	CO7329	A	4ACSR	6.95Y	115.8	0.01	10.23	1.30	1	9	1	99	0.00	0.0	8.336	0	0	0	0	6	L
L CO7434	CO7426	A	4ACSR	6.95Y	115.8	0.02	10.25	1.13	1	8	0	100	0.00	0.0	8.672	0	0	0	1	6	L
L CO7354	CO7434	A	4ACSR	6.95Y	115.8	0.00	10.25	1.13	1	8	0	100	0.00	0.0	8.729	0	0	0	1	5	L
L CO7318	CO7354	A	4ACSR	6.95Y	115.8	0.00	10.25	0.00	0	0	0	100	0.00	0.0	8.838	0	0	0	1	1	L
L CO8342	CO7354	A	4ACSR	6.94Y	115.7	0.02	10.26	0.82	1	6	0	100	0.00	0.0	9.173	0	0	0	1	3	L
L CO-498548990	CO8342	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.274	0	0	0	0	2	L
L CO-1676950053	CO-498548990	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.352	0	0	0	1	1	L
L CO6352	CO-498548990	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.383	0	0	0	1	1	L
L OH330207001	CO6352	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.483	0	0	0	0	0	L
L OH330207002	OH330207001	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.567	0	0	0	0	0	L
L OH330207003	OH330207002	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.643	0	0	0	0	0	L
L OH330207004	OH330207003	A	2ACSR	6.94Y	115.7	0.00	10.26	0.00	0	0	0	100	0.00	0.0	9.710	0	0	0	0	0	L
L CO7429	CO7430	A	4ACSR	6.95Y	115.8	0.01	10.22	2.51	2	17	1	100	0.00	0.0	8.139	0	0	0	1	1	L
L CO1478459136	CO7372	A	2ACSR	6.96Y	116.0	0.00	9.97	1.07	1	7	0	100	0.00	0.0	7.325	0	0	0	1	1	L
L CO-1714934910	CO7368	A	2ACSR	6.98Y	116.4	0.00	9.59	0.00	0	0	0	100	0.00	0.0	6.831	0	0	0	1	1	L
L CO1557642705	CO-1409394140	A	1/OPRIURD	6.99Y	116.6	0.00	9.44	2.33	2	16	1	100	0.00	0.0	6.601	0	0	0	1	1	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	8508	111	0	0	0	0	233		0.00	8852	Lowest Voltage =	113.67 on Element UD270553002
KVAR	1573	23	-642	-17	0	0	496			1432	Max Accm VoltD =	12.33 on Element UD270553002
											Max Elem VoltD =	5.50 on Element RG35

Balanced Voltage Drop Report

Summary

Source: HILDA

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
HILDA		ABC	HILDA	7.56Y	126.0	0.00	0.00	1852.20	0	41267	7854	98	0.00	0.0	0.000	0	0	0	0	3208	
C CO448	HILDA	ABC	700 MCM Hd	7.56Y	126.0	0.02	0.02	1852.20	178	41267	7854	98	3.40	0.0	0.004	0	0	0	0	3208 C	
C CO449	CO448	ABC	700 MCM Hd	7.56Y	126.0	0.02	0.05	1852.20	178	41264	7830	98	3.40	0.0	0.008	0	0	0	0	3208 C	
----- Feeder No. 0 (Pine Hills) Beginning with Device OC30 -----																					
C CO362	CO672	ABC	4/OACSR	7.50Y	124.9	0.22	1.05	386.12	114	8555	1581	98	11.97	0.1	0.468	0	0	0	3	1184 C	
C CO697	CO362	ABC	4/OACSR	7.48Y	124.7	0.30	1.35	384.44	113	8508	1543	98	15.80	0.2	0.548	0	0	0	1	1175 C	
C CO698	CO697	ABC	4/OACSR	7.47Y	124.6	0.07	1.42	384.44	113	8492	1515	98	3.93	0.0	0.568	0	0	0	0	1174 C	
C CO483	CO698	ABC	4/OACSR	7.47Y	124.4	0.16	1.58	382.69	113	8449	1503	98	8.67	0.1	0.612	0	0	0	0	1162 C	
C CO674	CO483	ABC	4/OACSR	7.45Y	124.2	0.25	1.83	382.69	113	8440	1488	98	13.37	0.2	0.681	0	0	0	0	4	1162 C
C CO675	CO674	ABC	4/OACSR	7.45Y	124.1	0.08	1.92	381.94	112	8410	1462	99	4.47	0.1	0.704	0	0	0	0	1	1158 C
C CO673	CO675	ABC	4/OACSR	7.44Y	124.0	0.10	2.01	381.15	112	8388	1452	99	5.22	0.1	0.730	0	0	0	3	1157 C	
C CO337	CO673	ABC	4/OACSR	7.42Y	123.7	0.24	2.25	379.46	112	8346	1437	99	12.74	0.2	0.797	0	0	0	0	1	1147 C
C CO352	CO337	ABC	4/OACSR	7.42Y	123.6	0.15	2.40	378.63	111	8315	1412	99	7.99	0.1	0.838	0	0	0	0	0	1145 C
C CO499	CO352	ABC	4/OACSR	7.39Y	123.1	0.48	2.88	368.01	108	8073	1364	99	24.85	0.3	0.976	0	0	0	0	0	1110 C
C CO500	CO499	ABC	4/OACSR	7.37Y	122.9	0.22	3.10	368.01	108	8048	1321	99	11.31	0.1	1.039	0	0	0	0	0	1110 C
C CO803	CO500	ABC	4/OACSR	7.37Y	122.8	0.06	3.16	368.01	108	8037	1301	99	3.34	0.0	1.057	0	0	0	0	1	1110 C
C CO804	CO803	ABC	4/OACSR	7.36Y	122.7	0.10	3.26	368.01	108	8033	1295	99	5.40	0.1	1.087	0	0	0	0	0	1109 C
C CO650	CO804	ABC	4/OACSR	7.36Y	122.7	0.02	3.28	326.40	96	7119	1152	99	0.94	0.0	1.093	0	0	0	0	0	1001 C
C CO687	OC400322001	ABC	4/OACSR	7.36Y	122.6	0.10	3.38	326.40	96	7118	1151	99	4.71	0.1	1.127	0	0	0	0	2	1001 C
C CO688	CO687	ABC	4/OACSR	7.35Y	122.5	0.14	3.52	325.85	96	7101	1141	99	6.55	0.1	1.173	0	0	0	0	0	999 C
C CO508	CO688	ABC	4/OACSR	7.34Y	122.3	0.16	3.68	325.85	96	7094	1129	99	7.39	0.1	1.225	0	0	0	0	2	999 C
C CO507	CO508	ABC	4/OACSR	7.33Y	122.2	0.11	3.79	325.65	96	7083	1116	99	4.91	0.1	1.260	0	0	0	0	0	997 C
C CO685	CO507	ABC	4/OACSR	7.33Y	122.1	0.07	3.86	324.06	95	7043	1102	99	3.28	0.0	1.283	0	0	0	0	1	995 C
C CO686	CO685	ABC	4/OACSR	7.32Y	122.0	0.11	3.97	310.18	91	6752	957	99	5.16	0.1	1.323	0	0	0	0	0	994 C
C CO509	CO686	ABC	4/OACSR	7.31Y	121.9	0.12	4.10	310.18	91	6747	948	99	5.50	0.1	1.366	0	0	0	0	0	994 C
C CO513	CO509	ABC	4/OACSR	7.30Y	121.7	0.16	4.26	310.18	91	6741	938	99	7.28	0.1	1.423	0	0	0	0	0	994 C
C CO8192	CO513	ABC	4/OACSR	7.28Y	121.3	0.49	4.74	310.18	91	6734	926	99	22.29	0.3	1.596	0	0	0	0	0	994 C
C CO999	CO840	ABC	2ACSR	7.22Y	120.3	0.23	5.73	188.04	104	4057	416	99	7.46	0.2	2.007	0	0	0	2	638 C	
C CO78310533	CO999	ABC	2ACSR	7.21Y	120.2	0.04	5.77	186.43	104	4016	397	100	1.29	0.0	2.016	0	0	0	0	0	635 C
L CO3060	CO3059	C	4ACSR	7.01Y	116.9	0.16	9.14	50.24	36	349	54	99	0.44	0.1	4.458	0	0	0	0	0	53 L
L CO3061	CO3060	C	4ACSR	6.99Y	116.5	0.38	9.52	45.52	33	315	49	99	0.97	0.3	4.648	0	0	0	1	47 L	
L CO3172	CO3061	C	2ACSR	6.99Y	116.5	0.00	9.52	3.20	2	22	3	99	0.00	0.0	4.680	0	0	0	1	3 L	
L CO897685477	CO3172	C	2ACSR	6.99Y	116.5	0.00	9.53	0.94	1	7	1	99	0.00	0.0	4.720	0	0	0	1	1 L	
L CO-1886490675	CO3172	C	2ACSR	6.99Y	116.5	0.00	9.53	1.18	1	8	1	99	0.00	0.0	4.742	0	0	0	0	1	L
L CO2084320906	CO-1886490675	C	2ACSR	6.99Y	116.5	0.00	9.53	1.18	1	8	1	99	0.00	0.0	4.776	0	0	0	1	1 L	
L CO8239	CO3061	C	4ACSR	6.95Y	115.9	0.63	10.15	41.54	30	287	45	99	1.45	0.5	4.986	0	0	0	0	1	43 L
L CO2401	CO8239	C	4ACSR	6.94Y	115.7	0.20	10.35	41.54	30	285	44	99	0.46	0.2	5.093	0	0	0	0	0	41 L
L CO2527	CO2401	C	4ACSR	6.93Y	115.5	0.13	10.48	41.54	30	285	44	99	0.30	0.1	5.164	0	0	0	0	0	41 L
L CO2526	CO2527	C	4ACSR	6.92Y	115.3	0.25	10.73	41.54	30	285	44	99	0.58	0.2	5.300	0	0	0	0	1	41 L
L CO2528	CO2526	C	4ACSR	6.90Y	115.0	0.23	10.96	41.54	30	284	43	99	0.53	0.2	5.424	0	0	0	0	0	40 L
L CO2440	CO2528	C	4ACSR	6.90Y	115.0	0.01	10.97	3.05	2	21	3	99	0.00	0.0	5.483	0	0	0	2	2 L	
L CO2396	CO2396	C	4ACSR	6.90Y	115.0	0.05	11.01	38.49	27	263	40	99	0.11	0.0	5.454	0	0	0	1	38 L	
L OH390427004	CO2396	C	4ACSR	6.90Y	115.0	0.00	11.01	0.00	0	0	0	100	0.00	0.0	5.494	0	0	0	0	0	0 L
L OH390427003	CO2396	C	4ACSR	6.89Y	114.9	0.09	11.10	38.49	27	263	40	99	0.20	0.1	5.507	0	0	0	0	0	37 L
L CO2441	OH390427003	C	4ACSR	6.89Y	114.9	0.00	11.10	1.58	1	11	2	98	0.00	0.0	5.566	0	0	0	2	2 L	
L CO2530	OH390427003	C	4ACSR	6.85Y	114.2	0.73	11.83	34.66	25	236	36	99	1.41	0.6	5.981	0	0	0	0	0	35 L
L CO2529	CO2530	C	4ACSR	6.84Y	114.0	0.13	11.96	34.66	25	235	35	99	0.25	0.1	6.064	0	0	0	1	35 L	
L CO2531	CO2529	C	4ACSR	6.84Y	114.0	0.05	12.01	33.88	24	229	34	99	0.10	0.0	6.099	0	0	0	0	0	34 L
L CO2532	CO2531	C	4ACSR	6.84Y	113.9	0.06	12.08	33.88	24	229	34	99	0.12	0.1	6.141	0	0	0	0	1	34 L
L CO2533	CO2532	C	4ACSR	6.83Y	113.8	0.09	12.17	33.88	24	229	34	99	0.18	0.1	6.204	0	0	0	0	1	33 L
L CO2538	CO2533	C	4ACSR	6.82Y	113.7	0.13	12.30	33.88	24	229	34	99	0.24	0.1	6.288	0	0	0	0	0	32 L
L CO2537	CO2538	C	4ACSR	6.82Y	113.6	0.11	12.41	33.88	24	229	34	99	0.21	0.1	6.360	0	0	0	0	1	32 L
L CO2535	CO2537	C	4ACSR	6.81Y	113.5	0.10	12.51	33.88	24	228	34	99	0.20	0.1	6.429	0	0	0	2	31 L	
L CO2534	CO2535	C	4ACSR	6.80Y	113.4	0.12	12.63	30.51	22	206	30	99	0.21	0.1	6.518	0	0	0	2	29 L	
L CO2536	CO2534	C	4ACSR	6.80Y	113.3	0.07	12.70	28.11	20	189	28	99	0.11	0.1	6.572	0	0	0	0	0	27 L
L CO2637	CO2536	C	4ACSR	6.79Y	113.2	0.06	12.76	25.47	18	171	25	99	0.08	0.0	6.624	0	0	0	1	24 L	
L CO2636	CO2637	C	4ACSR	6.79Y	113.2	0.05	12.81	25.47	18	171	25	99	0.07	0.0	6.667	0	0	0	0	0	23 L
L CO2639	CO2636	C	4ACSR	6.79Y	113.1	0.05	12.86	25.47	18	171	25	99	0.08	0.0	6.715	0	0	0	1	21 L	
L CO2638	CO2639	C	4ACSR	6.78Y	113.0	0.1															

Balanced Voltage Drop Report
Source: HILDA

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	% KVAR	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru			
L CO8383	CO2646	C	4ACSR	6.75Y	112.4	0.01	13.58	2.26	2	15	2	99	0.00	0.0	7.661	0	0	0	1	4	L
L CO1957	CO8383	C	4ACSR	6.75Y	112.4	0.00	13.58	2.26	2	15	2	99	0.00	0.0	7.693	0	0	0	1	3	L
L CO1698	CO1957	C	4ACSR	6.75Y	112.4	0.00	13.58	0.60	0	4	1	97	0.00	0.0	7.721	0	0	0	1	2	L
L CO1616	CO1698	C	4ACSR	6.75Y	112.4	0.00	13.58	0.60	0	4	1	97	0.00	0.0	7.780	0	0	0	1	1	L
L CO1795	CO1698	C	4ACSR	6.75Y	112.4	0.00	13.58	0.00	0	0	0	100	0.00	0.0	7.768	0	0	0	0	0	L
L CO1794	CO1795	C	4ACSR	6.75Y	112.4	0.00	13.58	0.00	0	0	0	100	0.00	0.0	7.863	0	0	0	0	0	L
L CO2024	CO1794	C	4ACSR	6.75Y	112.4	0.00	13.58	0.00	0	0	0	100	0.00	0.0	7.953	0	0	0	0	0	L
L CO2023	CO2024	C	4ACSR	6.75Y	112.4	0.00	13.58	0.00	0	0	0	100	0.00	0.0	7.958	0	0	0	0	0	L
L CO2473	CO2640	C	4ACSR	6.77Y	112.8	0.01	13.16	1.79	1	12	2	99	0.00	0.0	7.082	0	0	0	1	1	L
L CO2771	CO2636	C	4ACSR	6.79Y	113.2	0.00	12.81	0.00	0	0	0	100	0.00	0.0	6.718	0	0	0	1	2	L
L CO2770	CO2771	C	4ACSR	6.79Y	113.2	0.00	12.81	0.00	0	0	0	100	0.00	0.0	6.785	0	0	0	1	1	L
L CO2780	CO2536	C	2ACSR	6.80Y	113.3	0.01	12.71	2.64	1	18	3	99	0.00	0.0	6.706	0	0	0	0	3	L
L CO2779	CO2780	C	2ACSR	6.80Y	113.3	0.00	12.71	2.64	1	18	3	99	0.00	0.0	6.722	0	0	0	1	3	L
L CO2786	CO2779	C	2ACSR	6.80Y	113.3	0.00	12.71	0.60	0	4	1	97	0.00	0.0	6.825	0	0	0	0	1	L
L CO2783	CO2786	C	2ACSR	6.80Y	113.3	0.00	12.71	0.60	0	4	1	97	0.00	0.0	6.868	0	0	0	0	1	L
L CO2785	CO2783	C	2ACSR	6.80Y	113.3	0.00	12.71	0.60	0	4	1	97	0.00	0.0	6.921	0	0	0	0	1	L
L CO2784	CO2785	C	2ACSR	6.80Y	113.3	0.00	12.72	0.60	0	4	1	97	0.00	0.0	6.972	0	0	0	1	1	L
L CO2781	CO2779	C	2ACSR	6.80Y	113.3	0.00	12.71	1.68	1	11	2	98	0.00	0.0	6.768	0	0	0	1	1	L
L CO8254	CO2401	C	4ACSR	6.94Y	115.7	0.00	10.35	0.00	0	0	0	100	0.00	0.0	5.211	0	0	0	0	0	L
L CO2849	CO8239	C	4ACSR	6.95Y	115.9	0.00	10.15	0.00	0	0	0	100	0.00	0.0	5.128	0	0	0	0	1	L
L CO2641	CO2849	C	4ACSR	6.95Y	115.9	0.00	10.15	0.00	0	0	0	100	0.00	0.0	5.460	0	0	0	1	1	L
L CO3173	CO3060	C	4ACSR	7.01Y	116.9	0.00	9.14	0.00	0	0	0	100	0.00	0.0	4.541	0	0	0	1	1	L
L CO3458	CO3060	C	4ACSR	7.01Y	116.9	0.01	9.14	4.72	3	33	5	99	0.00	0.0	4.494	0	0	0	1	5	L
L CO3459	CO3458	C	4ACSR	7.01Y	116.8	0.01	9.15	1.86	1	13	2	99	0.00	0.0	4.586	0	0	0	2	3	L
L CO3460	CO3459	C	4ACSR	7.01Y	116.8	0.00	9.15	1.80	1	12	2	99	0.00	0.0	4.624	0	0	0	1	1	L
L CO3174	CO3458	C	4ACSR	7.01Y	116.9	0.00	9.14	0.00	0	0	0	100	0.00	0.0	4.589	0	0	0	0	0	L
L CO3175	CO3458	C	4ACSR	7.01Y	116.8	0.01	9.15	2.86	2	20	3	99	0.00	0.0	4.541	0	0	0	1	1	L
P UB390218003	UB390218002	A	1/OPRIURD	7.05Y	117.6	0.00	8.42	-0.02	0	0	0	100	0.00	0.0	4.369	0	0	0	0	0	P
L CO3444	CO3443	A	4ACSR	7.02Y	117.0	0.15	9.03	25.70	18	179	27	99	0.21	0.1	4.678	0	0	0	1	35	L
L CO3445	CO3444	A	4ACSR	7.01Y	116.8	0.15	9.18	25.70	18	178	26	99	0.21	0.1	4.808	0	0	0	1	34	L
L CO8258	CO3445	A	4ACSR	6.99Y	116.6	0.24	9.42	25.70	18	178	26	99	0.35	0.2	5.021	0	0	0	0	33	L
L CO2460	CO8258	A	4ACSR	6.99Y	116.6	0.00	9.42	0.64	0	4	1	97	0.00	0.0	5.068	0	0	0	1	1	L
L CO2405	CO8258	A	4ACSR	6.99Y	116.4	0.13	9.55	25.07	18	173	25	99	0.18	0.1	5.139	0	0	0	0	32	L
L CO2757	CO2405	A	4ACSR	6.99Y	116.4	0.00	9.56	0.62	0	4	1	97	0.00	0.0	5.222	0	0	0	2	3	L
L CO2756	CO2757	A	4ACSR	6.99Y	116.4	0.00	9.56	0.00	0	0	0	100	0.00	0.0	5.305	0	0	0	1	1	L
L CO2625	CO2405	A	4ACSR	6.98Y	116.4	0.08	9.63	23.93	17	165	24	99	0.10	0.1	5.210	0	0	0	1	27	L
L CO2622	CO2625	A	4ACSR	6.97Y	116.2	0.18	9.81	23.93	17	165	24	99	0.24	0.1	5.376	0	0	0	0	26	L
L CO2624	CO2622	A	4ACSR	6.97Y	116.1	0.08	9.88	23.93	17	165	24	99	0.10	0.1	5.447	0	0	0	0	26	L
L CO2623	CO2624	A	4ACSR	6.96Y	115.9	0.20	10.08	23.93	17	165	24	99	0.27	0.2	5.636	0	0	0	0	26	L
L CO2627	CO2623	A	4ACSR	6.94Y	115.7	0.26	10.34	23.93	17	165	24	99	0.34	0.2	5.877	0	0	0	1	24	L
L CO2626	CO2627	A	4ACSR	6.94Y	115.6	0.02	10.36	22.24	16	153	22	99	0.02	0.0	5.897	0	0	0	1	23	L
L CO2630	CO2626	A	4ACSR	6.93Y	115.6	0.06	10.42	19.59	14	135	19	99	0.07	0.1	5.968	0	0	0	0	19	L
L CO2631	CO2630	A	4ACSR	6.93Y	115.5	0.08	10.50	19.59	14	134	19	99	0.09	0.1	6.062	0	0	0	1	19	L
L CO2629	CO2631	A	4ACSR	6.93Y	115.4	0.06	10.56	18.45	13	127	18	99	0.06	0.0	6.133	0	0	0	0	17	L
L CO2628	CO2629	A	4ACSR	6.92Y	115.4	0.06	10.62	18.45	13	127	18	99	0.06	0.0	6.204	0	0	0	0	17	L
L CO2633	CO2628	A	4ACSR	6.92Y	115.3	0.05	10.66	14.31	10	98	14	99	0.04	0.0	6.275	0	0	0	0	15	L
L CO2632	CO2633	A	4ACSR	6.92Y	115.3	0.06	10.72	14.31	10	98	14	99	0.05	0.0	6.370	0	0	0	0	15	L
L OH390438001	CO2632	A	4ACSR	6.92Y	115.3	0.00	10.72	-0.06	0	0	0	100	0.00	0.0	6.402	0	0	0	0	0	L
L UB390438001	OH390438001	A	1/OPRIURD	6.92Y	115.3	0.00	10.72	-0.06	0	0	0	100	0.00	0.0	6.508	0	0	0	0	0	L
L CO2760	CO2632	A	4ACSR	6.92Y	115.3	0.00	10.72	0.00	0	0	0	100	0.00	0.0	6.417	0	0	0	0	1	L
L CO2762	CO2760	A	4ACSR	6.92Y	115.3	0.00	10.72	0.00	0	0	0	100	0.00	0.0	6.488	0	0	0	0	0	L
L CO2761	CO2762	A	4ACSR	6.92Y	115.3	0.00	10.72	0.00	0	0	0	100	0.00	0.0	6.607	0	0	0	1	1	L
L CO2466	CO2632	A	4ACSR	6.92Y	115.3	0.01	10.73	4.15	3	28	4	99	0.00	0.0	6.417	0	0	0	1	1	L
L CO2406	CO2632	A	4ACSR	6.92Y	115.3	0.02	10.74	10.17	7	70	10	99	0.01	0.0	6.417	0	0	0	0	13	L
L CO2467	CO2406	A	4ACSR	6.92Y	115.3	0.01	10.75	1.36	1	9	1	99	0.00	0.0	6.500	0	0	0	1	1	L
L CO2635	CO2406	A	4ACSR	6.91Y	115.2	0.04	10.79	8.81	6	60	9	99	0.02	0.0	6.524	0	0	0	0	12	L
L CO2634	CO2635	A	4ACSR	6.91Y	115.2	0.04	10.82	8.81	6	60	9	99	0.02	0.0	6.619	0	0	0	0	12	L
L CO2407	CO2634	A	4ACSR	6.91Y	115.1	0.07	10.89	8.49	6	58	8	99	0.03	0.1	6.808	0	0	0	0	11	L
L CO2408	CO2407	A	4ACSR	6.91Y	115.1	0.01	10.90	6.66	5	45	7	99	0.00	0.0	6.844	0	0	0	0	8	L
L CO2409	CO2408	A	4ACSR	6.90Y	115.1	0.02	10.92	5.85	4	40	6	99	0.01	0.0	6.903	0	0	0	0	7	L
L CO2468	CO2409	A	4ACSR	6.90Y	115.1	0.00	10.92	1.76	1	12	2	99	0.00	0.0	6.962	0	0	0	1	1	L
L CO2410	CO2409	A	4ACSR	6.90Y	115.0	0.05	10.97	4.10	3	28	4	99	0.01	0.0	7.152	0	0	0	1	6	L
L CO2469	CO2410	A	4ACSR	6.90Y	115.0	0.00	10.97	1.14	1	8	1	99	0.00	0.0	7.211	0	0	0	2	2	L
L CO2470	CO2410	A	4ACSR	6.90Y	115.0	0.00	10.97	0.15	0	1	0	100	0.00	0.0	7.211	0	0	0	1	1	L
L CO2765	CO2410	A	4ACSR	6.90Y	115.0	0.01	10.97	2.80	2	19	3	99	0.00	0.0	7.223	0	0	0	0	2	L
L CO2767	CO2765	A	4ACSR	6.90Y	115.0	0.01	10.98	2.80	2	19	3	99	0.00	0.0	7.270	0	0	0	1	2	L
L CO2766	CO2767	A	4ACSR	6.90Y	115.0	0.01	10.99	1.36	1	9	1	99	0.00	0.0	7.412	0	0	0	1	1	L
L CO2471	CO2408	A	4ACSR	6.91Y	115.1	0.00	10.91	0.80	1	5	1	98	0.00	0.0							

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Summary

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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
L CO2759	CO2623	A	4ACSR	6.96Y	115.9	0.00	10.08	0.00	0	0	0	100	0.00	0.0	5.731	0	0	0	0	1	L
L CO2758	CO2759	A	4ACSR	6.96Y	115.9	0.00	10.08	0.00	0	0	0	100	0.00	0.0	5.766	0	0	0	1	1	L
L CO2461	CO2405	A	4ACSR	6.99Y	116.4	0.00	9.56	0.52	0	4	1	97	0.00	0.0	5.205	0	0	0	2	2	L
P UD390209006	UD390209005	A	1/OPRIURD	7.17Y	119.4	0.00	6.58	-0.02	0	0	0	100	0.00	0.0	3.261	0	0	0	0	0	P
P CO3308	UD390209005	A	1/OPRIURD	7.17Y	119.4	0.00	6.58	-0.01	0	0	0	100	0.00	0.0	3.255	0	0	0	0	0	P
P CO1154	UD400112001	A	1/OPRIURD	7.15Y	119.2	0.00	6.76	-0.01	0	0	0	100	0.00	0.0	3.008	0	0	0	0	0	P
----- Feeder No. 0 (Guardian2) Beginning with Device OC26 -----																					
----- Feeder No. 0 (Guardian1) Beginning with Device OC29 -----																					
----- Feeder No. 0 (Bluestone) Beginning with Device OC28 -----																					
L CO1970	CO1967	C	4ACSR	7.01Y	116.9	0.77	9.09	75.52	54	481	230	90	3.04	0.6	4.126	0	0	0	1	85	L
L CO1969	CO1970	C	4ACSR	7.01Y	116.8	0.10	9.19	74.56	53	472	226	90	0.40	0.1	4.155	0	0	0	1	84	L
L CO1712	CO1969	C	4ACSR	6.98Y	116.3	0.47	9.66	73.65	53	466	223	90	1.79	0.4	4.288	0	0	0	1	83	L
L CO1971	CO1712	C	4ACSR	6.96Y	116.1	0.28	9.94	73.52	53	463	221	90	1.08	0.2	4.369	0	0	0	0	82	L
L CO1972	CO1971	C	4ACSR	6.93Y	115.6	0.50	10.44	73.52	53	462	220	90	1.91	0.4	4.511	0	0	0	0	82	L
L CO1708	CO1972	C	4ACSR	6.92Y	115.4	0.15	10.60	71.21	51	446	212	90	0.57	0.1	4.556	0	0	0	1	80	L
L CO-44609816	CO1708	C	2ACSR	6.91Y	115.2	0.16	10.76	71.21	40	445	212	90	0.55	0.1	4.622	0	0	0	0	79	L
L CO-1187644494	CO-44609816	C	2ACSR	6.91Y	115.2	0.07	10.83	69.10	38	432	205	90	0.24	0.1	4.653	0	0	0	1	78	L
L CO1610	CO-1187644494	C	4ACSR	6.91Y	115.2	0.00	10.83	0.66	0	4	2	89	0.00	0.0	4.700	0	0	0	2	2	L
L CO1547	CO-1187644494	C	4ACSR	6.89Y	114.9	0.26	11.09	66.09	47	413	196	90	0.90	0.2	4.735	0	0	0	3	75	L
L CO2009	CO1547	C	4ACSR	6.89Y	114.9	0.02	11.11	50.82	36	316	151	90	0.04	0.0	4.742	0	0	0	0	56	L
L OC57	CO2009	C	35 H OCR	6.89Y	114.9	0.00	11.11	50.82	145	316	151	90	0.00	0.0	4.742	0	0	0	0	56	L
L CO2010	OC57	C	4ACSR	6.89Y	114.8	0.10	11.21	50.82	36	316	151	90	0.26	0.1	4.783	0	0	0	2	56	L
L CO1705	CO2010	C	4ACSR	6.89Y	114.8	0.02	11.23	6.56	5	41	20	90	0.01	0.0	4.840	0	0	0	3	5	L
L CO1706	CO1705	C	4ACSR	6.89Y	114.8	0.01	11.23	2.06	1	13	6	91	0.00	0.0	4.901	0	0	0	2	2	L
L CO1715	CO2010	C	4ACSR	6.88Y	114.6	0.19	11.40	43.34	31	269	129	90	0.42	0.2	4.874	0	0	0	2	48	L
L CO1716	CO1715	C	4ACSR	6.87Y	114.6	0.03	11.43	43.34	31	269	129	90	0.07	0.0	4.889	0	0	0	0	46	L
L CO1713	CO1716	C	4ACSR	6.87Y	114.5	0.02	11.45	38.63	28	240	114	90	0.04	0.0	4.901	0	0	0	3	39	L
L CO1714	CO1713	C	4ACSR	6.87Y	114.4	0.11	11.56	30.91	22	192	91	90	0.17	0.1	4.972	0	0	0	2	36	L
L CO1719	CO1714	C	4ACSR	6.86Y	114.4	0.06	11.62	29.39	21	182	87	90	0.10	0.1	5.018	0	0	0	1	32	L
L CO1725	CO1719	C	4ACSR	6.86Y	114.3	0.06	11.68	28.19	20	175	83	90	0.09	0.1	5.065	0	0	0	1	31	L
L CO1726	CO1725	C	4ACSR	6.85Y	114.2	0.08	11.76	28.04	20	174	82	90	0.12	0.1	5.124	0	0	0	0	30	L
L CO1615	CO1726	C	4ACSR	6.85Y	114.2	0.01	11.77	2.69	2	17	8	90	0.00	0.0	5.181	0	0	0	3	3	L
L CO1548	CO1726	C	4ACSR	6.85Y	114.1	0.12	11.88	25.36	18	157	74	90	0.16	0.1	5.223	0	0	0	0	27	L
L CO1871	CO1548	C	4ACSR	6.85Y	114.1	0.01	11.89	5.11	4	31	15	90	0.00	0.0	5.275	0	0	0	1	5	L
L CO1869	CO1871	C	4ACSR	6.85Y	114.1	0.01	11.90	2.91	2	18	9	89	0.00	0.0	5.313	0	0	0	1	4	L
L CO1877	CO1869	C	2ACSR	6.85Y	114.1	0.00	11.90	2.44	1	15	7	91	0.00	0.0	5.350	0	0	0	1	2	L
L CO1878	CO1877	C	2ACSR	6.85Y	114.1	0.00	11.91	0.99	1	6	3	89	0.00	0.0	5.403	0	0	0	1	1	L
L CO1870	CO1869	C	4ACSR	6.85Y	114.1	0.00	11.90	0.00	0	0	0	100	0.00	0.0	5.346	0	0	0	1	1	L
L CO1872	CO1548	C	4ACSR	6.85Y	114.1	0.02	11.91	5.78	4	36	17	90	0.01	0.0	5.314	0	0	0	1	7	L
L CO1873	CO1872	C	4ACSR	6.84Y	114.1	0.01	11.92	3.95	3	24	12	89	0.00	0.0	5.380	0	0	0	2	5	L
L OH390659003	CO1873	C	4ACSR	6.84Y	114.1	0.00	11.92	3.51	3	22	10	91	0.00	0.0	5.398	0	0	0	0	3	L
L CO8195	OH390659003	C	4ACSR	6.84Y	114.1	0.01	11.93	3.16	2	19	9	90	0.00	0.0	5.452	0	0	0	1	3	L
L CO1099193300	CO8195	C	4ACSR	6.84Y	114.1	0.01	11.94	2.30	2	14	7	89	0.00	0.0	5.525	0	0	0	0	2	L
L CO-811588838	CO1099193300	C	4ACSR	6.84Y	114.1	0.00	11.94	2.28	2	14	7	89	0.00	0.0	5.570	0	0	0	1	1	L
L CO-1697222439	CO1099193300	C	4ACSR	6.84Y	114.1	0.00	11.94	0.03	0	0	0	100	0.00	0.0	5.550	0	0	0	1	1	L
L CO1621	CO1872	C	4ACSR	6.85Y	114.1	0.00	11.91	1.25	1	8	4	89	0.00	0.0	5.347	0	0	0	1	1	L
L CO8223	CO1548	C	4ACSR	6.84Y	114.0	0.08	11.96	14.47	10	90	42	91	0.06	0.1	5.334	0	0	0	1	15	L
L CO207	CO8223	C	4ACSR	6.84Y	114.0	0.01	11.97	14.47	10	90	42	91	0.00	0.0	5.344	0	0	0	0	14	L
L CO208	CO207	C	4ACSR	6.84Y	114.0	0.02	11.99	13.37	10	83	38	91	0.01	0.0	5.375	0	0	0	1	13	L
L CO209	CO208	C	4ACSR	6.84Y	114.0	0.04	12.02	12.16	9	76	35	91	0.02	0.0	5.441	0	0	0	0	12	L
L CO143	CO209	C	4ACSR	6.84Y	114.0	0.00	12.03	1.16	1	7	3	92	0.00	0.0	5.469	0	0	0	0	1	L
L CO144	CO143	C	4ACSR	6.84Y	114.0	0.00	12.03	1.16	1	7	3	92	0.00	0.0	5.507	0	0	0	0	1	L
L CO145	CO144	C	4ACSR	6.84Y	114.0	0.00	12.03	1.16	1	7	3	92	0.00	0.0	5.540	0	0	0	1	1	L
L CO19	CO209	C	4ACSR	6.84Y	113.9	0.04	12.06	11.01	8	68	31	91	0.02	0.0	5.512	0	0	0	0	11	L
L CO20	CO19	C	4ACSR	6.83Y	113.9	0.03	12.09	10.00	7	62	29	91	0.01	0.0	5.569	0	0	0	0	10	L
L CO80	CO20	C	4ACSR	6.83Y	113.9	0.04	12.13	9.11	7	57	26	91	0.02	0.0	5.656	0	0	0	0	8	L
L CO81	CO80	C	4ACSR	6.83Y	113.8	0.05	12.18	9.11	7	57	26	91	0.02	0.0	5.770	0	0	0	0	8	L
L CO213	CO81	C	4ACSR	6.83Y	113.8	0.01	12.18	9.11	7	57	26	91	0.00	0.0	5.789	0	0	0	0	8	L
L CO214	CO213	C	4ACSR	6.82Y	113.7	0.07	12.25	9.11	7	57	26	91	0.03	0.1	5.950	0	0	0	1	8	L
L CO48	CO214	C	1/OPRIURD	6.82Y	113.7	0.01	12.26	2.54	2	16	7	92	0.00	0.0	6.033	0	0	0	2	2	L
L CO313	CO214	C	4ACSR	6.82Y	113.7	0.02	12.28	6.12	4	38	17	91	0.01	0.0	6.030	0	0	0	0	5	L
L CO314	CO313	C	1/OPRIURD																		

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-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	KVAR	Cons On	Cons Thru	
L CO56	CO207	C	4ACSR	6.84Y	114.0	0.00	11.97	1.10	1	7	3	92	0.00	0.0	5.394	0	0	0	1	1	L
L CO1613	CO1714	C	4ACSR	6.87Y	114.4	0.00	11.56	0.85	1	5	3	86	0.00	0.0	4.996	0	0	0	0	2	L
L OH390659002	CO1613	C	4ACSR	6.87Y	114.4	0.00	11.56	0.01	0	0	0	100	0.00	0.0	5.048	0	0	0	0	2	L
L CO1614	OH390659002	C	4ACSR	6.87Y	114.4	0.00	11.56	0.01	0	0	0	100	0.00	0.0	5.107	0	0	0	2	2	L
L CO1707	CO1716	C	4ACSR	6.87Y	114.6	0.01	11.44	4.70	3	29	14	90	0.00	0.0	4.941	0	0	0	5	7	L
L CO1985	CO1707	C	4ACSR	6.87Y	114.6	0.00	11.44	1.26	1	8	4	89	0.00	0.0	4.984	0	0	0	0	2	L
L CO1984	CO1985	C	4ACSR	6.87Y	114.6	0.00	11.44	1.26	1	8	4	89	0.00	0.0	4.996	0	0	0	1	2	L
L CO1724	CO1984	C	4ACSR	6.87Y	114.6	0.00	11.44	1.26	1	8	4	89	0.00	0.0	5.012	0	0	0	1	1	L
L CO1612	CO2010	C	4ACSR	6.89Y	114.8	0.00	11.21	0.88	1	5	3	86	0.00	0.0	4.830	0	0	0	1	1	L
L CO1868	CO1547	C	4ACSR	6.89Y	114.9	0.03	11.12	12.20	9	77	35	91	0.02	0.0	4.784	0	0	0	1	15	L
L CO1867	CO1868	C	4ACSR	6.89Y	114.9	0.02	11.14	8.83	6	56	25	91	0.01	0.0	4.821	0	0	0	1	11	L
L CO2029	CO1867	C	4ACSR	6.89Y	114.8	0.02	11.15	8.32	6	52	23	91	0.01	0.0	4.860	0	0	0	2	10	L
L CO2030	CO2029	C	4ACSR	6.89Y	114.8	0.00	11.15	0.00	0	0	0	100	0.00	0.0	4.939	0	0	0	2	2	L
L CO1642	CO2029	C	1/OPRIURD	6.89Y	114.8	0.01	11.16	8.32	6	52	23	91	0.00	0.0	4.904	0	0	0	2	6	L
L CO-646431446	CO1642	C	1/OPRIURD	6.89Y	114.8	0.01	11.17	5.68	4	36	15	92	0.00	0.0	4.962	0	0	0	2	4	L
L CO-835565164	CO-835565164	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	3.06	2	20	8	93	0.00	0.0	5.001	0	0	0	0	2	L
L CO1789069490	CO-835565164	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	1.57	1	10	5	89	0.00	0.0	5.040	0	0	0	1	1	L
L CO-479596393	CO-835565164	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	1.51	1	10	3	96	0.00	0.0	5.052	0	0	0	1	1	L
L UD390659001	CO-479596393	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.20	0	0	-1	0	0.00	0.0	5.083	0	0	0	0	0	L
L UD390659002	UD390659001	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.18	0	0	-1	0	0.00	0.0	5.117	0	0	0	0	0	L
L UD390659003	UD390659002	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.16	0	0	-1	0	0.00	0.0	5.143	0	0	0	0	0	L
L UD390659004	UD390659003	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.15	0	0	-1	0	0.00	0.0	5.168	0	0	0	0	0	L
L UD390659005	UD390659004	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.13	0	0	-1	0	0.00	0.0	5.190	0	0	0	0	0	L
L UD390659006	UD390659005	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.12	0	0	-1	0	0.00	0.0	5.218	0	0	0	0	0	L
L OH390659004	UD390659006	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.10	0	0	-1	0	0.00	0.0	5.233	0	0	0	0	0	L
L OH390659005	OH390659004	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.05	0	0	0	100	0.00	0.0	5.279	0	0	0	0	0	L
L UD390659008	OH390659005	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.02	0	0	0	100	0.00	0.0	5.308	0	0	0	0	0	L
L UD390659007	OH390659004	C	1/OPRIURD	6.89Y	114.8	0.00	11.17	-0.05	0	0	0	100	0.00	0.0	5.308	0	0	0	0	0	L
L CO1874	CO1868	C	4ACSR	6.89Y	114.9	0.00	11.12	1.97	1	12	6	89	0.00	0.0	4.805	0	0	0	0	3	L
L CO1875	CO1874	C	4ACSR	6.89Y	114.9	0.00	11.13	1.97	1	12	6	89	0.00	0.0	4.843	0	0	0	2	3	L
L CO-389346800	CO1875	C	2ACSR	6.89Y	114.9	0.00	11.13	1.65	1	10	5	89	0.00	0.0	4.884	0	0	0	1	1	L
L CO1611	CO1547	C	4ACSR	6.89Y	114.9	0.01	11.10	2.57	2	16	8	89	0.00	0.0	4.783	0	0	0	1	1	L
L CO35987788	CO-44609816	C	2ACSR	6.91Y	115.2	0.01	10.76	2.10	1	13	6	91	0.00	0.0	4.698	0	0	0	1	1	L
L CO1710	CO1972	C	4ACSR	6.93Y	115.6	0.00	10.45	2.32	2	14	7	89	0.00	0.0	4.555	0	0	0	1	2	L
L CO1711	CO1710	C	4ACSR	6.93Y	115.6	0.00	10.45	0.71	1	4	2	89	0.00	0.0	4.593	0	0	0	1	1	L

----- Feeder No. 0 (Interchange) Beginning with Device OC27 -----

----- Feeder No. 0 (Cranston) Beginning with Device OC31 -----

C CO1310280569	CO1168	ABC	2ACSR	7.23Y	120.4	0.16	5.55	193.57	108	4173	494	99	5.12	0.1	2.538	0	0	0	0	671	C
C CO-1600802925	CO1310280569	ABC	2ACSR	7.16Y	119.4	1.09	6.65	191.62	106	4126	488	99	35.51	0.9	2.767	0	0	0	0	668	C
L CO847	CO1064	ABC	1/OACSR	7.00Y	116.7	0.66	9.30	160.74	70	3381	310	100	17.68	0.5	3.937	0	0	0	0	561	L
L FSE2250	CO847	B	20 N FUSE	7.00Y	116.7	0.00	9.30	2.50	14	17	2	99	0.00	0.0	3.937	0	0	0	0	1	L
L CO905	FSE2250	B	4ACSR	7.00Y	116.7	0.01	9.31	2.50	2	17	2	99	0.00	0.0	4.008	0	0	0	1	1	L
L FSE2321	CO847	B	20 N FUSE	7.00Y	116.7	0.00	9.30	30.88	173	203	76	94	0.00	0.0	3.937	0	0	0	0	17	L
L CO1044	FSE2321	B	8ACWC	6.99Y	116.5	0.15	9.45	30.88	31	203	76	94	0.25	0.1	4.008	0	0	0	2	17	L
L CO1045	CO1044	B	8ACWC	6.97Y	116.1	0.46	9.91	29.37	29	191	74	93	0.75	0.4	4.241	0	0	0	0	15	L
L CO1046	CO1045	B	8ACWC	6.94Y	115.7	0.38	10.29	26.86	27	173	72	92	0.56	0.3	4.451	0	0	0	2	10	L
L CO1047	CO1046	B	8ACWC	6.93Y	115.5	0.20	10.49	26.69	27	171	72	92	0.30	0.2	4.563	0	0	0	0	8	L
L CO1059	CO1047	B	8ACWC	6.92Y	115.4	0.15	10.64	26.68	27	170	72	92	0.23	0.1	4.648	0	0	0	1	7	L
L CO1060	CO1059	B	8ACWC	6.92Y	115.3	0.04	10.68	26.23	26	167	71	92	0.05	0.0	4.668	0	0	0	2	6	L
L CO1171	CO1060	B	8ACWC	6.91Y	115.1	0.19	10.87	23.60	24	148	69	91	0.25	0.2	4.790	0	0	0	0	4	L
L CO1048	CO1171	B	8ACWC	6.91Y	115.1	0.03	10.90	23.60	24	148	69	91	0.04	0.0	4.809	0	0	0	0	4	L
L CO1049	CO1048	B	8ACWC	6.90Y	115.1	0.05	10.95	23.60	24	147	69	91	0.06	0.0	4.839	0	0	0	0	4	L
L CO1050	CO1049	B	8ACWC	6.88Y	114.6	0.42	11.37	23.60	24	147	69	91	0.55	0.4	5.104	0	0	0	0	4	L
L CO891	CO1050	B	8ACWC	6.88Y	114.6	0.00	11.37	0.04	0	0	0	100	0.00	0.0	5.246	0	0	0	2	2	L
L CO844	CO1050	B	8ACWC	6.87Y	114.5	0.16	11.53	23.57	24	147	69	91	0.22	0.1	5.208	0	0	0	0	2	L
L CO892	CO844	B	1/OPRIURD	6.86Y	114.4	0.06	11.60	13.01	9	81	38	91	0.04	0.0	5.406	0	0	0	1	1	L
L CO893	CO844	B	1/OPRIURD	6.86Y	114.4	0.07	11.61	10.56	7	66	31	91	0.03	0.1	5.483	0	0	0	1	1	L
L CO894	CO1047	B	8ACWC	6.93Y	115.5	0.00	10.49	0.01	0	0	0	100	0.00	0.0	4.639	0	0	0	1	1	L
L CO1051	CO1045	B	8ACWC	6.96Y	116.1	0.02	9.93	2.61	3	18	2	99	0.00	0.0	4.373	0	0	0	1	5	L
L CO1052	CO1051	B	8ACWC	6.96Y	116.1	0.01	9.94	2.61	3	18	2	99	0.00	0.0	4.411	0	0	0	0	4	L
L CO1053	CO1052	B	8ACWC	6.96Y	116.1	0.01	9.95	2.61	3	18	2	99	0.00	0.0	4.459	0	0	0	0	4	L
L CO1054	CO1053	B	8ACWC	6.96Y	116.0	0.01	9.95	2.61	3	18	2	99	0.00	0.0	4.497	0	0	0	0	4	L
L CO1055	CO1054	B	8ACWC	6.96Y	116.0	0.01	9.96	2.61	3	18	2	99	0.00	0.0	4.534	0	0	0	0	4	L
L CO1056	CO1055	B	8ACWC	6.96Y	116.0	0.01	9.97	2.61	3	18	2	99	0.00	0.0	4.591	0	0	0	0	4	L
L CO1057	CO1056	B	8ACWC	6.96Y	116.0	0.02	9.99	2.61	3	18	2	99	0.00	0.0	4.714	0	0	0	0	4	L
L CO1058	CO1057	B	8ACWC	6.96Y	116.0	0.00	9.99	2.61	3	18	2	99	0.00	0.0	4.738	0	0	0	0	4	L
L CO1040	CO847	ABC	1/OACSR	6.99Y	116.5	0.20	9.50	150.01	65	3144	216	100	5.08	0.2	4.021	0	0	0	1	543	L
L CO1041	CO1040	ABC	1/OACSR	6.99Y	116.4	0.07	9.57	149.92													

Balanced Voltage Drop Report
Source: HILDA

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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		Units Displayed In Volts													-----Element-----							
		-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru		
L CO1032	CO1031	A	4ACSR	6.96Y	116.1	0.06	9.92	12.90	9	89	9	99	0.05	0.1	4.316	0	0	0	2	13	L	
L CO1033	CO1032	A	4ACSR	6.96Y	116.1	0.02	9.94	12.40	9	86	9	99	0.01	0.0	4.348	0	0	0	0	11	L	
L CO1035	CO1033	A	4ACSR	6.96Y	116.0	0.01	9.95	12.40	9	86	9	99	0.01	0.0	4.368	0	0	0	3	10	L	
L CO1036	CO1035	A	4ACSR	6.96Y	116.0	0.04	10.00	10.38	7	72	7	100	0.03	0.0	4.462	0	0	0	1	7	L	
L CO1037	CO1036	A	4ACSR	6.96Y	116.0	0.01	10.00	3.02	2	21	2	100	0.00	0.0	4.538	0	0	0	1	2	L	
L CO1034	CO1037	A	4ACSR	6.96Y	116.0	0.01	10.01	2.49	2	17	2	99	0.00	0.0	4.595	0	0	0	1	1	L	
L CO1038	CO1036	A	4ACSR	6.96Y	116.0	0.03	10.03	4.55	3	32	3	100	0.01	0.0	4.614	0	0	0	0	4	L	
L CO1039	CO1038	A	4ACSR	6.96Y	116.0	0.00	10.03	2.18	2	15	2	99	0.00	0.0	4.661	0	0	0	1	1	L	
L CO-2083595302	CO1038	A	2ACSR	6.96Y	116.0	0.01	10.03	2.37	1	16	2	99	0.00	0.0	4.691	0	0	0	0	2	L	
L CO-848759943	CO-2083595302	A	2ACSR	6.96Y	116.0	0.01	10.04	2.37	1	16	2	99	0.00	0.0	4.805	0	0	0	0	2	L	
L CO71957360	CO-848759943	A	2ACSR	6.96Y	116.0	0.01	10.04	2.25	1	16	2	99	0.00	0.0	4.889	0	0	0	1	1	L	
L CO968033090	CO-848759943	A	2ACSR	6.96Y	116.0	0.00	10.04	0.12	0	0	0	100	0.00	0.0	4.905	0	0	0	1	1	L	
L CO-2014473118	CO1038	A	2ACSR	6.96Y	116.0	0.00	10.03	0.00	0	0	0	100	0.00	0.0	4.645	0	0	0	1	1	L	
L CO903	CO1033	A	4ACSR	6.96Y	116.1	0.00	9.94	0.00	0	0	0	100	0.00	0.0	4.386	0	0	0	1	1	L	
L CO-455964811	CO1043	ABC	2ACSR	6.95Y	115.8	0.34	10.18	143.68	80	2998	190	100	8.54	0.3	4.263	0	0	0	0	525	L	
L FSE2252	CO-455964811	A	20 N FUSE	6.95Y	115.8	0.00	10.18	0.83	5	6	1	99	0.00	0.0	4.263	0	0	0	0	1	L	
L CO-1400634914	FSE2252	A	2ACSR	6.95Y	115.8	0.00	10.18	0.83	0	6	1	99	0.00	0.0	4.342	0	0	0	1	1	L	
L CO459953315	CO-455964811	ABC	2ACSR	6.93Y	115.5	0.32	10.50	143.40	80	2984	184	100	8.09	0.3	4.356	0	0	0	0	524	L	
L FSE2253	CO459953315	C	20 N FUSE	6.93Y	115.5	0.00	10.50	0.00	0	0	0	100	0.00	0.0	4.356	0	0	0	0	1	L	
L CO902	FSE2253	C	4ACSR	6.93Y	115.5	0.00	10.50	0.00	0	0	0	100	0.00	0.0	4.450	0	0	0	1	1	L	
L CO8228	CO459953315	ABC	1/OACSR	6.93Y	115.5	0.01	10.51	143.40	62	2976	179	100	0.26	0.0	4.360	0	0	0	0	523	L	
L FSE2254	CO8228	B	20 N FUSE	6.93Y	115.5	0.00	10.51	0.00	0	0	0	100	0.00	0.0	4.360	0	0	0	0	1	L	
L CO4165	FSE2254	B	2ACSR	6.93Y	115.5	0.00	10.51	0.00	0	0	0	100	0.00	0.0	4.425	0	0	0	1	1	L	
P CO194452391	FSE2310	A	2ACSR	7.34Y	122.4	0.00	3.59	-0.05	0	0	0	100	0.00	0.0	6.420	0	0	0	0	1	P	
P CO917416481	CO194452391	A	1/OPRIURD	7.34Y	122.4	0.00	3.59	-0.05	0	0	0	100	0.00	0.0	6.495	0	0	0	1	1	P	
P CO-796919359	FSE2308	A	2ACSR	7.34Y	122.3	0.00	3.73	-0.04	0	0	0	100	0.00	0.0	6.469	0	0	0	0	0	1	P
P CO381140322	CO-796919359	A	1/OPRIURD	7.34Y	122.3	0.00	3.73	-0.04	0	0	0	100	0.00	0.0	6.531	0	0	0	1	1	P	
L CO4577	CO4576	C	4ACSR	7.02Y	116.9	0.16	9.07	37.02	26	259	27	99	0.34	0.1	10.976	0	0	0	3	84	L	
L CO4578	CO4577	C	4ACSR	7.01Y	116.8	0.09	9.16	33.81	24	236	24	99	0.17	0.1	11.036	0	0	0	1	81	L	
L CO4579	CO4578	C	4ACSR	7.00Y	116.7	0.15	9.31	28.89	21	201	21	99	0.25	0.1	11.159	0	0	0	0	1	74	L
L CO4580	CO4579	C	4ACSR	7.00Y	116.6	0.07	9.38	28.77	21	200	21	99	0.11	0.1	11.213	0	0	0	2	73	L	
L CO4581	CO4580	C	4ACSR	6.99Y	116.5	0.07	9.45	27.05	19	188	19	99	0.11	0.1	11.273	0	0	0	2	71	L	
L CO1315713295	CO4581	C	2ACSR	6.99Y	116.5	0.00	9.45	0.00	0	0	0	100	0.00	0.0	11.347	0	0	0	1	1	L	
L CO4493	CO4581	C	4ACSR	6.99Y	116.5	0.00	9.45	0.89	1	6	1	99	0.00	0.0	11.340	0	0	0	1	1	L	
L CO4485	CO4581	C	4ACSR	6.98Y	116.4	0.19	9.64	26.02	19	181	19	99	0.29	0.2	11.444	0	0	0	2	67	L	
L CO4587	CO4485	C	4ACSR	6.98Y	116.3	0.04	9.69	23.98	17	167	17	99	0.06	0.0	11.485	0	0	0	1	63	L	
L CO4588	CO4587	C	4ACSR	6.98Y	116.3	0.04	9.72	23.98	17	166	17	99	0.05	0.0	11.519	0	0	0	2	62	L	
L CO4564	CO4588	C	4ACSR	6.98Y	116.3	0.00	9.73	1.32	1	9	1	99	0.00	0.0	11.571	0	0	0	1	3	L	
L CO4565	CO4564	C	4ACSR	6.98Y	116.3	0.01	9.73	1.02	1	7	1	99	0.00	0.0	11.690	0	0	0	2	2	L	
L CO4484	CO4588	C	4ACSR	6.97Y	116.2	0.10	9.82	21.15	15	147	15	99	0.12	0.1	11.626	0	0	0	2	57	L	
L CO4582	CO4484	C	4ACSR	6.97Y	116.1	0.04	9.86	20.75	15	144	15	99	0.04	0.0	11.667	0	0	0	1	54	L	
L CO4583	CO4582	C	4ACSR	6.97Y	116.1	0.03	9.89	19.75	14	137	14	99	0.03	0.0	11.702	0	0	0	4	53	L	
L CO4584	CO4583	C	4ACSR	6.96Y	116.0	0.09	9.98	17.55	13	122	12	100	0.09	0.1	11.814	0	0	0	3	49	L	
L CO4585	CO4584	C	4ACSR	6.96Y	116.0	0.03	10.00	15.75	11	109	11	99	0.02	0.0	11.851	0	0	0	1	46	L	
L CO4586	CO4585	C	4ACSR	6.95Y	115.9	0.10	10.10	15.75	11	109	11	99	0.09	0.1	11.992	0	0	0	0	45	L	
L CO4556	CO4586	C	4ACSR	6.95Y	115.9	0.01	10.10	2.01	1	14	1	100	0.00	0.0	12.077	0	0	0	0	4	L	
L CO4574	CO4556	C	4ACSR	6.95Y	115.9	0.01	10.11	2.01	1	14	1	100	0.00	0.0	12.143	0	0	0	1	4	L	
L CO4601	CO4574	C	4ACSR	6.95Y	115.9	0.00	10.11	0.96	1	7	1	99	0.00	0.0	12.158	0	0	0	0	3	L	
L CO4602	CO4601	C	4ACSR	6.95Y	115.9	0.00	10.11	0.00	0	0	0	100	0.00	0.0	12.247	0	0	0	1	1	L	
L CO4491	CO4601	C	4ACSR	6.95Y	115.9	0.00	10.11	0.96	1	7	1	99	0.00	0.0	12.215	0	0	0	2	2	L	
L CO4483	CO4586	C	4ACSR	6.95Y	115.8	0.07	10.17	13.74	10	95	10	99	0.05	0.1	12.109	0	0	0	0	41	L	
L CO4527	CO4483	C	4ACSR	6.95Y	115.8	0.01	10.17	0.62	0	4	0	100	0.00	0.0	12.379	0	0	0	0	6	L	
L CO4528	CO4527	C	2ACSR	6.95Y	115.8	0.00	10.18	0.62	0	4	0	100	0.00	0.0	12.509	0	0	0	0	6	L	
L CO-1821014386	CO4528	C	2ACSR	6.95Y	115.8	0.00	10.18	0.51	0	4	0	100	0.00	0.0	12.645	0	0	0	0	5	L	
L CO4529	CO-1821014386	C	4ACSR	6.95Y	115.8	0.00	10.18	0.51	0	4	0	100	0.00	0.0	12.682	0	0	0	0	5	L	
L CO4561	CO4529	C	4ACSR	6.95Y	115.8	0.00	10.18	0.00	0	0	0	100	0.00	0.0	12.739	0	0	0	0	2	L	
L CO4562	CO4561	C	4ACSR	6.95Y	115.8	0.00	10.18	0.00	0	0	0	100	0.00	0.0	12.777	0	0	0	2	2	L	
L CO4530	CO4529	C	4ACSR	6.95Y	115.8	0.01	10.19	0.51	0	4	0	100	0.00	0.0	12.938	0	0	0	0	3	L	
L CO8298	CO4530	C	4ACSR	6.95Y	115.8	0.00	10.19	0.51	0	4	0	100	0.00	0.0	13.033	0	0	0	3	3	L	
L CO512095037	CO4528	C	2ACSR	6.95Y	115.8	0.00	10.18	0.11	0	1	0	100	0.00	0.0	12.582	0	0	0	1	1	L	
L CO4593	CO4483	C	4ACSR	6.95Y	115.8	0.00	10.17	13.12	9	91	9	100	0.00	0.0	12.115	0	0	0	0	35	L	
L OC127	CO4593	C	15 H OCR	6.95Y	115.8	0.00	10.17	13.12	87	91	9	100	0.00	0.0	12.115	0	0	0	0	35	L	
L CO4594	OC127	C	4ACSR	6.94Y	115.7	0.17	10.34	13.12	9	91	9	100	0.13	0.1	12.409	0	0	0	0	35	L	
L CO4503	CO4594	C	4ACSR	6.93Y	115.6	0.08	10.42	13.12	9	91	9	100	0.06	0.1	12.549	0	0	0	1	35	L	
L CO4504	CO4503	C	4ACSR	6.93Y	115.5	0.08	10.50	12.19	9	84	8	100	0.06	0.1	12.704	0	0	0	0	34	L	
L CO4505	CO4504	C	4ACSR	6.93Y	115.5	0.02	10.52	12.19	9	84	8	100	0.01	0.0	12.737	0	0	0	2	34	L	
L CO4506	CO4505	C																				

Balanced Voltage Drop Report
Source: HILDA

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru	
L CO4518	CO4517	C	4ACSR	6.91Y	115.2	0.01	10.81	2.16	2	15	1	100	0.00	0.0	13.585	0	0	0	6	L	
L CO4519	CO4518	C	4ACSR	6.91Y	115.2	0.00	10.81	2.16	2	15	1	100	0.00	0.0	13.623	0	0	0	1	6	L
L CO4566	CO4519	C	4ACSR	6.91Y	115.2	0.00	10.82	2.14	2	15	1	100	0.00	0.0	13.677	0	0	0	1	5	L
L CO4567	CO4566	C	4ACSR	6.91Y	115.2	0.01	10.82	1.93	1	13	1	100	0.00	0.0	13.737	0	0	0	0	4	L
L CO4520	CO4567	C	4ACSR	6.91Y	115.2	0.01	10.83	1.93	1	13	1	100	0.00	0.0	13.834	0	0	0	0	4	L
L CO4521	CO4520	C	4ACSR	6.91Y	115.2	0.00	10.83	1.93	1	13	1	100	0.00	0.0	13.854	0	0	0	0	4	L
L CO4522	CO4521	C	4ACSR	6.91Y	115.2	0.00	10.83	1.93	1	13	1	100	0.00	0.0	13.874	0	0	0	2	4	L
L CO4523	CO4522	C	4ACSR	6.91Y	115.2	0.00	10.83	0.20	0	1	0	100	0.00	0.0	13.901	0	0	0	2	2	L
L CO4557	CO4484	C	4ACSR	6.97Y	116.2	0.00	9.82	0.39	0	3	0	100	0.00	0.0	11.664	0	0	0	0	1	L
L CO4558	CO4557	C	4ACSR	6.97Y	116.2	0.00	9.82	0.39	0	3	0	100	0.00	0.0	11.721	0	0	0	1	1	L
L CO4492	CO4485	C	4ACSR	6.98Y	116.4	0.01	9.65	2.04	1	14	1	100	0.00	0.0	11.500	0	0	0	2	2	L
L CO4559	CO4578	C	4ACSR	7.01Y	116.8	0.01	9.17	2.70	2	19	2	99	0.00	0.0	11.131	0	0	0	0	3	L
L CO4560	CO4559	C	4ACSR	7.01Y	116.8	0.01	9.18	2.70	2	19	2	99	0.00	0.0	11.188	0	0	0	3	3	L
L CO4597	CO4578	C	4ACSR	7.01Y	116.8	0.01	9.17	2.04	1	14	1	100	0.00	0.0	11.131	0	0	0	1	3	L
L CO4494	CO4597	C	4ACSR	7.01Y	116.8	0.00	9.17	1.54	1	11	1	100	0.00	0.0	11.160	0	0	0	1	1	L
L CO4598	CO4597	C	4ACSR	7.01Y	116.8	0.00	9.17	0.50	0	4	0	100	0.00	0.0	11.160	0	0	0	1	1	L
P CA-1163955036	CO4248	ABC	Cap (300)	7.47Y	124.5	0.00	1.46	-14.41	0	0	-323	0	0.00	0.0	5.160	0	0	0	0	0	P
L CO2091135312	CO8205	A	2ACSR	7.02Y	117.0	0.01	9.00	3.39	2	24	2	100	0.00	0.0	5.006	0	0	0	0	3	L
L CO4169	CO2091135312	A	2ACSR	7.02Y	117.0	0.01	9.01	3.39	2	24	2	100	0.00	0.0	5.095	0	0	0	1	3	L
L CO-1698718927	CO4169	A	2ACSR	7.02Y	117.0	0.01	9.02	1.83	1	13	1	100	0.00	0.0	5.358	0	0	0	0	1	L
L CO4170	CO-1698718927	A	4ACSR	7.02Y	117.0	0.00	9.03	1.83	1	13	1	100	0.00	0.0	5.415	0	0	0	0	1	L
L CO4171	CO4170	A	4ACSR	7.02Y	117.0	0.01	9.04	1.83	1	13	1	100	0.00	0.0	5.490	0	0	0	0	1	L
L CO4172	CO4171	A	4ACSR	7.02Y	117.0	0.01	9.04	1.83	1	13	1	100	0.00	0.0	5.585	0	0	0	0	1	L
L CO4173	CO4172	A	4ACSR	7.02Y	116.9	0.02	9.06	1.83	1	13	1	100	0.00	0.0	5.784	0	0	0	0	1	L
L CO4174	CO4173	A	4ACSR	7.02Y	116.9	0.01	9.06	1.83	1	13	1	100	0.00	0.0	5.860	0	0	0	0	1	L
L CO4318	CO4174	A	4ACSR	7.02Y	116.9	0.01	9.07	1.83	1	13	1	100	0.00	0.0	5.940	0	0	0	0	1	L
L CO1028	CO4318	A	4ACSR	7.02Y	116.9	0.00	9.08	1.83	1	13	1	100	0.00	0.0	6.002	0	0	0	0	1	L
L CO1029	CO1028	A	4ACSR	7.02Y	116.9	0.00	9.08	1.83	1	13	1	100	0.00	0.0	6.040	0	0	0	0	1	L
L CO1030	CO1029	A	4ACSR	7.01Y	116.9	0.00	9.08	1.83	1	13	1	100	0.00	0.0	6.096	0	0	0	0	1	L
L CO8203	CO1030	A	4ACSR	7.01Y	116.9	0.01	9.09	1.83	1	13	1	100	0.00	0.0	6.163	0	0	0	1	1	L
L CO-649828667	CO4169	A	2ACSR	7.02Y	117.0	0.00	9.01	0.94	1	7	1	99	0.00	0.0	5.154	0	0	0	1	1	L
P CO-211974972	CO1089	A	1/OPRIURD	7.05Y	117.6	0.00	8.43	-0.03	0	0	0	100	0.00	0.0	3.754	0	0	0	1	1	P
P OH400114002	CO846	C	2ACSR	7.15Y	119.1	0.00	6.90	-0.03	0	0	0	100	0.00	0.0	2.965	0	0	0	0	0	P
P OH400114003	OH400114002	C	2ACSR	7.15Y	119.1	0.00	6.90	-0.03	0	0	0	100	0.00	0.0	3.052	0	0	0	0	0	P
P UD400114001	OH400114003	C	1/OPRIURD	7.15Y	119.1	0.00	6.90	-0.03	0	0	0	100	0.00	0.0	3.101	0	0	0	0	0	P
P CO404	CO641	C	1/OPRIURD	7.34Y	122.3	0.00	3.67	-0.03	0	0	0	100	0.00	0.0	1.954	0	0	0	2	2	P

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	39516	623	0	0	0	0	1128		0.00	41267	Lowest Voltage = 112.42	on Element CO1616
KVAR	7504	124	-1576	-62	0	0	1864			7854	Max Accm VoltD = 13.58	on Element CO1616
											Max Elem VoltD = 10.51	on Element RG26

Balanced Voltage Drop Report

Summary

Source: HILLSBORO

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
 Title:
 Case:

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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru	
HILLSBORO		ABC	HILLSBORO	15.12Y	126.0	0.00	0.00	268.31	0	12141	850	100	0.00	0.0	0.000	0	0	0	0	2716
----- Feeder No. 0 (Grange City) Beginning with Device OC164 -----																				
P UD320869001	CO-1786790005	C	1/OPRIURD	15.09Y	125.7	0.00	0.28	-0.05	0	0	0	0	0.00	0.0	0.709	0	0	0	0	0 P
L CO1324	CO1464	C	4ACSR	7.02Y	117.0	0.01	9.00	1.90	1	13	1	100	0.00	0.0	16.359	0	0	0	1	1 L
L CO1455	CO1454	C	4ACSR	7.02Y	117.0	0.03	9.03	8.53	6	60	4	100	0.02	0.0	16.194	0	0	0	3	12 L
L CO1456	CO1455	C	4ACSR	7.02Y	117.0	0.01	9.04	7.96	6	56	3	100	0.01	0.0	16.228	0	0	0	0	9 L
L CO1288	CO1456	C	4ACSR	7.02Y	116.9	0.01	9.05	5.41	4	38	2	100	0.00	0.0	16.284	0	0	0	0	7 L
L CO1457	CO1288	C	4ACSR	7.02Y	116.9	0.00	9.06	0.81	1	6	0	100	0.00	0.0	16.335	0	0	0	1	3 L
L CO1458	CO1457	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	16.351	0	0	0	0	2 L
L CO1459	CO1458	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	16.386	0	0	0	0	1 L
L CO1460	CO1459	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	16.784	0	0	0	0	1 L
L CO1461	CO1460	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	16.927	0	0	0	0	1 L
L CO1462	CO1461	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	17.030	0	0	0	0	1 L
L CO1463	CO1462	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	17.078	0	0	0	1	1 L
L CO1328	CO1458	C	4ACSR	7.02Y	116.9	0.00	9.06	0.00	0	0	0	100	0.00	0.0	16.388	0	0	0	1	1 L
L CO1326	CO1288	C	4ACSR	7.02Y	116.9	0.01	9.06	2.86	2	20	1	100	0.00	0.0	16.337	0	0	0	3	3 L
L CO1327	CO1288	C	4ACSR	7.02Y	116.9	0.00	9.06	1.74	1	12	1	100	0.00	0.0	16.344	0	0	0	1	1 L
L CO1325	CO1456	C	4ACSR	7.02Y	117.0	0.00	9.05	2.55	2	18	1	100	0.00	0.0	16.272	0	0	0	2	2 L
----- Feeder No. 0 (Sherburne) Beginning with Device OC162 -----																				
L CO-1239129141	CO-2048359733	ABC	2ACSR	7.02Y	117.0	0.25	9.02	75.42	42	1590	-68	-100	3.51	0.2	10.766	0	0	0	0	397 L
L CO1592769445	CO-1239129141	ABC	2ACSR	7.01Y	116.8	0.17	9.19	75.42	42	1586	-70	-100	2.43	0.2	10.867	0	0	0	0	397 L
L FSE1914	CO1592769445	A	20 N FUSE	7.01Y	116.8	0.00	9.19	0.41	2	3	0	100	0.00	0.0	10.867	0	0	0	0	4 L
L CO12096	FSE1914	A	4ACSR	7.01Y	116.8	0.00	9.20	0.41	0	3	0	100	0.00	0.0	11.041	0	0	0	1	4 L
L CO12097	CO12096	A	4ACSR	7.01Y	116.8	0.00	9.20	0.41	0	3	0	100	0.00	0.0	11.239	0	0	0	0	3 L
L CO12027	CO12097	A	4ACSR	7.01Y	116.8	0.00	9.20	0.41	0	3	0	100	0.00	0.0	11.327	0	0	0	1	3 L
L CO12098	CO12027	A	4ACSR	7.01Y	116.8	0.00	9.20	0.02	0	0	0	100	0.00	0.0	11.371	0	0	0	1	2 L
L CO12099	CO12098	A	4ACSR	7.01Y	116.8	0.00	9.20	0.02	0	0	0	100	0.00	0.0	11.516	0	0	0	1	1 L
L CO-619036140	CO1592769445	ABC	2ACSR	6.97Y	116.2	0.58	9.77	75.28	42	1581	-72	-100	8.06	0.5	11.204	0	0	0	0	393 L
L CO-1304761795	CO-619036140	ABC	2ACSR	6.96Y	116.0	0.21	9.98	75.28	42	1573	-77	-100	2.96	0.2	11.327	0	0	0	0	393 L
L CO-223442987	CO-1304761795	ABC	2ACSR	6.96Y	116.0	0.05	10.03	15.74	9	328	-21	-100	0.15	0.0	11.467	0	0	0	0	96 L
L CO2024595143	CO-223442987	ABC	2ACSR	6.95Y	115.9	0.08	10.11	15.74	9	328	-21	-100	0.23	0.1	11.690	0	0	0	0	96 L
L FSE1877	CO2024595143	C	20 N FUSE	6.95Y	115.9	0.00	10.11	0.37	2	3	0	100	0.00	0.0	11.690	0	0	0	0	1 L
L CO11463	FSE1877	C	4ACSR	6.95Y	115.9	0.00	10.11	0.37	0	3	0	100	0.00	0.0	11.785	0	0	0	1	1 L
L CO-751844449	CO2024595143	ABC	2ACSR	6.95Y	115.9	0.02	10.13	15.62	9	325	-21	-100	0.05	0.0	11.743	0	0	0	0	95 L
L CO-915037168	CO-751844449	ABC	2ACSR	6.94Y	115.7	0.15	10.28	15.62	9	325	-21	-100	0.43	0.1	12.157	0	0	0	0	95 L
L FSE1879	CO-915037168	B	20 N FUSE	6.94Y	115.7	0.00	10.28	0.00	0	0	0	100	0.00	0.0	12.157	0	0	0	0	1 L
L CO11470	FSE1879	B	4ACSR	6.94Y	115.7	0.00	10.28	0.00	0	0	0	100	0.00	0.0	12.394	0	0	0	1	1 L
L CO11548	CO-915037168	B	4ACSR	6.94Y	115.7	0.00	10.28	3.52	3	24	-2	-100	0.00	0.0	12.164	0	0	0	0	13 L
L OC319	CO11548	B	15 H OCR	6.94Y	115.7	0.00	10.28	3.52	23	24	-2	-100	0.00	0.0	12.164	0	0	0	0	13 L
L CO11549	OC319	B	4ACSR	6.94Y	115.7	0.06	10.33	3.52	3	24	-2	-100	0.01	0.1	12.574	0	0	0	0	13 L
L CO11459	CO11549	B	4ACSR	6.94Y	115.7	0.00	10.34	1.70	1	12	-1	-100	0.00	0.0	12.617	0	0	0	0	5 L
L CO11499	CO11459	B	4ACSR	6.94Y	115.7	0.00	10.34	0.50	0	3	0	100	0.00	0.0	12.688	0	0	0	1	4 L
L CO11500	CO11499	B	4ACSR	6.94Y	115.7	0.01	10.35	0.50	0	3	0	100	0.00	0.0	13.020	0	0	0	0	3 L
L CO11523	CO11500	B	4ACSR	6.94Y	115.7	0.00	10.35	0.00	0	0	0	100	0.00	0.0	13.138	0	0	0	0	0 L
L CO11524	CO11523	B	4ACSR	6.94Y	115.7	0.00	10.35	0.00	0	0	0	100	0.00	0.0	13.235	0	0	0	0	0 L
L CO11458	CO11500	B	4ACSR	6.94Y	115.7	0.00	10.35	0.50	0	3	0	100	0.00	0.0	13.043	0	0	0	0	3 L
L CO11489	CO11458	B	4ACSR	6.94Y	115.7	0.00	10.35	0.50	0	3	0	100	0.00	0.0	13.073	0	0	0	1	3 L
L CO11490	CO11489	B	4ACSR	6.94Y	115.7	0.00	10.35	0.50	0	3	0	100	0.00	0.0	13.209	0	0	0	1	2 L
L CO11532	CO11490	B	4ACSR	6.94Y	115.7	0.00	10.35	0.50	0	3	0	100	0.00	0.0	13.220	0	0	0	0	1 L
L CO11531	CO11532	B	4ACSR	6.94Y	115.6	0.00	10.35	0.50	0	3	0	100	0.00	0.0	13.285	0	0	0	1	1 L
L CO11526	CO11459	B	4ACSR	6.94Y	115.7	0.01	10.34	1.20	1	8	-1	-99	0.00	0.0	12.745	0	0	0	0	1 L
L CO11525	CO11526	B	4ACSR	6.94Y	115.7	0.00	10.34	0.00	0	0	0	100	0.00	0.0	12.762	0	0	0	0	0 L
L CO11474	CO11526	B	2ACSR	6.94Y	115.7	0.00	10.35	1.20	1	8	-1	-99	0.00	0.0	12.804	0	0	0	1	1 L
L CO17040	CO11549	B	4ACSR	6.94Y	115.6	0.02	10.35	1.82	1	13	-1	-100	0.00	0.0	12.843	0	0	0	0	8 L
L CO10559	CO17040	B	4ACSR	6.94Y	115.6	0.00	10.35	0.00	0	0	0	100	0.00	0.0	12.961	0	0	0	1	1 L
L CO10537	CO17040	B	4ACSR	6.94Y	115.6	0.00	10.36	1.82	1	13	-1	-100	0.00	0.0	12.881	0	0	0	0	6 L
L CO10560	CO10537	B	4ACSR	6.94Y	115.6	0.00	10.36	0.62	0	4	0	100	0.00	0.0	12.957	0	0	0	2	2 L
L CO10581	CO10537	B	4ACSR	6.94Y	115.6	0.00	10.36	1.21	1	8	-1	-99	0.00	0.0	12.985	0	0	0	0	4 L
L CO10582	CO10581	B	4ACSR	6.94Y	115.6	0.00	10.36	1.21	1	8	-1	-99	0.00	0.0	13.008	0	0	0	0	4 L
L CO10561	CO10582	B	4ACSR	6.94Y	115.6	0.00	10.37	0.97	1	7	-1	-99	0.00	0.0	13.069	0	0	0	1	1 L
L CO10658	CO10582	B	4ACSR	6.94Y	115.6	0.00	10.36	0.24	0	2	0	100	0.00	0.0	13.197	0	0	0	1	3 L
L CO10659	CO10658	B	4ACSR	6.94Y	1															

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		Units Displayed In Volts													-----Element-----					
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	QVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
L C011541	C011456	B	4ACSR	6.93Y	115.5	0.00	10.54	0.18	0	1	0	100	0.00	0.0	13.159	0	0	0	0	3 L
L C011540	C011541	B	4ACSR	6.93Y	115.5	0.00	10.54	0.18	0	1	0	100	0.00	0.0	13.179	0	0	0	2	3 L
L C011491	C011540	B	4ACSR	6.93Y	115.5	0.00	10.54	0.00	0	0	0	100	0.00	0.0	13.203	0	0	0	1	1 L
L C0688638615	C011456	B	2ACSR	6.93Y	115.5	0.00	10.54	0.07	0	0	0	100	0.00	0.0	13.185	0	0	0	1	1 L
L C0224431763	C02026537600	ABC	2ACSR	6.92Y	115.4	0.08	10.61	13.24	7	275	-18	-100	0.21	0.1	13.190	0	0	0	0	70 L
L CO-1653614511	C0224431763	ABC	2ACSR	6.92Y	115.3	0.05	10.65	13.24	7	274	-18	-100	0.12	0.0	13.346	0	0	0	0	70 L
L FSE1890	CO-1653614511	B	20 N FUSE	6.92Y	115.3	0.00	10.65	0.00	0	0	0	100	0.00	0.0	13.346	0	0	0	0	1 L
L C011468	FSE1890	B	4ACSR	6.92Y	115.3	0.00	10.65	0.00	0	0	0	100	0.00	0.0	13.629	0	0	0	1	1 L
L CO-1538473017	CO-1653614511	ABC	2ACSR	6.92Y	115.3	0.06	10.71	13.24	7	274	-18	-100	0.14	0.1	13.536	0	0	0	3	69 L
L C01360316319	CO-1538473017	ABC	2ACSR	6.91Y	115.2	0.06	10.76	13.24	7	274	-18	-100	0.14	0.1	13.724	0	0	0	0	66 L
L C011471	C01360316319	A	4ACSR	6.91Y	115.2	0.00	10.77	0.39	0	3	0	100	0.00	0.0	13.779	0	0	0	1	1 L
L FSE1881	C01360316319	B	20 N FUSE	6.91Y	115.2	0.00	10.76	0.00	0	0	0	100	0.00	0.0	13.724	0	0	0	0	0 L
L FSE1889	C01360316319	B	20 N FUSE	6.91Y	115.2	0.00	10.76	0.00	0	0	0	100	0.00	0.0	13.724	0	0	0	0	1 L
L C011467	FSE1889	B	4ACSR	6.91Y	115.2	0.00	10.76	0.00	0	0	0	100	0.00	0.0	13.823	0	0	0	1	1 L
L C011550	C01360316319	BC	6ACWC	6.91Y	115.2	0.00	10.77	19.66	14	271	-18	-100	0.01	0.0	13.730	0	0	0	0	64 L
L C011552	C011550	B	4ACSR	6.91Y	115.2	0.00	10.77	0.00	0	0	0	100	0.00	0.0	13.737	0	0	0	0	0 L
L C011534	C011552	B	4ACSR	6.91Y	115.2	0.00	10.77	0.00	0	0	0	100	0.00	0.0	13.775	0	0	0	0	0 L
L C011551	C011550	BC	6ACWC	6.91Y	115.1	0.14	10.91	19.66	14	271	-18	-100	0.35	0.1	13.925	0	0	0	0	64 L
L OH370219002	C011551	BC	6ACWC	6.90Y	115.0	0.05	10.96	19.66	14	271	-18	-100	0.11	0.0	13.986	0	0	0	0	64 L
L OC318	OH370219002	BC	35 H OCR	6.90Y	115.0	0.00	10.96	19.66	56	271	-18	-100	0.00	0.0	13.986	0	0	0	0	64 L
L C011527	OC318	BC	6ACWC	6.90Y	115.0	0.03	10.98	19.66	14	271	-18	-100	0.06	0.0	14.021	0	0	0	1	64 L
L C011530	C011527	BC	6ACWC	6.90Y	114.9	0.10	11.08	19.54	14	269	-18	-100	0.24	0.1	14.154	0	0	0	0	63 L
L C011528	C011530	BC	6ACWC	6.89Y	114.8	0.09	11.17	19.54	14	269	-18	-100	0.23	0.1	14.283	0	0	0	1	63 L
L C011529	C011528	BC	6ACWC	6.88Y	114.7	0.17	11.35	19.54	14	269	-18	-100	0.41	0.2	14.516	0	0	0	0	62 L
L FSE1882	C011529	C	20 N FUSE	6.88Y	114.7	0.00	11.35	38.07	214	261	-18	-100	0.00	0.0	14.516	0	0	0	0	49 L
L C011452	FSE1882	C	6ACWC	6.87Y	114.5	0.20	11.54	38.07	27	261	-18	-100	0.47	0.2	14.650	0	0	0	1	49 L
L C011481	C011452	C	6ACWC	6.86Y	114.3	0.11	11.65	32.96	24	226	-16	-100	0.22	0.1	14.733	0	0	0	3	44 L
L C011482	C011481	C	6ACWC	6.85Y	114.2	0.15	11.80	31.26	22	214	-15	-100	0.29	0.1	14.853	0	0	0	1	41 L
L C017122	C011482	C	6ACWC	6.84Y	114.1	0.15	11.95	30.86	22	211	-15	-100	0.29	0.1	14.979	0	0	0	0	40 L
L C011351	C017122	C	4ACSR	6.84Y	114.0	0.00	11.95	0.83	1	6	0	100	0.00	0.0	15.057	0	0	0	1	2 L
L C011350	C011351	C	4ACSR	6.84Y	114.0	0.00	11.95	0.24	0	2	0	100	0.00	0.0	15.099	0	0	0	1	1 L
L C011326	C017122	C	6ACWC	6.84Y	114.0	0.02	11.97	30.03	21	205	-15	-100	0.05	0.0	14.999	0	0	0	0	38 L
L C011324	C011326	C	4ACSR	6.84Y	114.0	0.00	11.97	0.00	0	0	0	100	0.00	0.0	15.057	0	0	0	1	1 L
L C011325	C011326	C	4ACSR	6.84Y	114.0	0.00	11.98	1.36	1	9	-1	-99	0.00	0.0	15.052	0	0	0	1	1 L
L C011327	C011326	C	6ACWC	6.84Y	114.0	0.02	12.00	28.67	20	196	-14	-100	0.04	0.0	15.019	0	0	0	1	36 L
L C011323	C011327	C	6ACWC	6.84Y	113.9	0.07	12.06	27.45	20	187	-13	-100	0.12	0.1	15.082	0	0	0	0	35 L
L C011237	C011323	C	4ACSR	6.84Y	113.9	0.00	12.07	0.47	0	3	0	100	0.00	0.0	15.196	0	0	0	2	2 L
L C011180	C011323	C	6ACWC	6.83Y	113.8	0.13	12.19	26.98	19	184	-13	-100	0.22	0.1	15.206	0	0	0	1	33 L
L C011202	C011180	C	6ACWC	6.83Y	113.8	0.06	12.25	20.25	14	138	-10	-100	0.07	0.1	15.276	0	0	0	0	27 L
L C011236	C011202	C	4ACSR	6.82Y	113.7	0.01	12.26	3.12	2	21	-2	-100	0.00	0.0	15.343	0	0	0	2	2 L
L C011328	C011202	C	2ACSR	6.82Y	113.7	0.04	12.29	17.14	10	117	-8	-100	0.04	0.0	15.359	0	0	0	2	25 L
L C01504133147	C011328	C	2ACSR	6.82Y	113.7	0.00	12.29	1.16	1	8	-1	-99	0.00	0.0	15.410	0	0	0	1	1 L
L C01282336817	C011328	C	2ACSR	6.82Y	113.7	0.04	12.32	15.71	9	107	-8	-100	0.04	0.0	15.453	0	0	0	0	22 L
L C011329	C01282336817	C	6ACWC	6.81Y	113.5	0.15	12.47	15.71	11	107	-8	-100	0.14	0.1	15.689	0	0	0	1	22 L
L C011216	C011329	C	4ACSR	6.81Y	113.5	0.00	12.47	1.05	1	7	-1	-99	0.00	0.0	15.740	0	0	0	2	2 L
L C011201	C011329	C	4ACSR	6.81Y	113.5	0.03	12.50	13.59	10	92	-7	-100	0.03	0.0	15.744	0	0	0	0	19 L
L C011231	C011201	C	4ACSR	6.81Y	113.5	0.00	12.50	1.96	1	13	-1	-100	0.00	0.0	15.791	0	0	0	2	2 L
L C011361	C011201	C	6ACWC	6.80Y	113.4	0.15	12.65	11.63	8	79	-6	-100	0.11	0.1	16.074	0	0	0	0	17 L
L C011336	C011361	C	6ACWC	6.80Y	113.3	0.03	12.67	7.76	6	53	-4	-100	0.01	0.0	16.165	0	0	0	0	7 L
L C011337	C011336	C	6ACWC	6.80Y	113.3	0.01	12.69	6.35	5	43	-3	-100	0.00	0.0	16.213	0	0	0	0	6 L
L C011166	C011337	C	6ACWC	6.80Y	113.3	0.02	12.70	3.89	3	26	-2	-100	0.00	0.0	16.334	0	0	0	0	4 L
L C011203	C011166	C	4ACSR	6.80Y	113.3	0.00	12.71	0.48	0	3	0	100	0.00	0.0	16.414	0	0	0	1	1 L
L C011204	C011166	C	4ACSR	6.80Y	113.3	0.01	12.71	3.41	2	23	-2	-100	0.00	0.0	16.403	0	0	0	2	3 L
L CO-1460213938	C011204	C	2ACSR	6.80Y	113.3	0.01	12.72	1.28	1	9	-1	-99	0.00	0.0	16.686	0	0	0	1	1 L
L C011338	C011337	C	4ACSR	6.80Y	113.3	0.01	12.70	2.46	2	17	-1	-100	0.00	0.0	16.312	0	0	0	1	2 L
L C011339	C011338	C	4ACSR	6.80Y	113.3	0.00	12.70	2.46	2	17	-1	-100	0.00	0.0	16.360	0	0	0	1	1 L
L C011235	C011336	C	2ACSR	6.80Y	113.3	0.00	12.68	1.40	1	10	-1	-100	0.00	0.0	16.291	0	0	0	1	1 L
L C011167	C011361	C	4ACSR	6.80Y	113.3	0.02	12.67	3.87	3	26	-2	-100	0.00	0.0	16.194	0	0	0	0	10 L
L C011332	C011167	C	4ACSR	6.80Y	113.3	0.00	12.67	0.02	0	0	0	100	0.00	0.0	16.301	0	0	0	1	6 L
L C011333	C011332	C	4ACSR	6.80Y	113.3	0.00	12.67	0.02	0	0	0	100	0.00	0.0	16.356	0	0	0	0	5 L
L C011363	C011333	C	4ACSR	6.80Y	113.3	0.00	12.67	0.02	0	0	0	100	0.00	0.0	16.501	0	0	0	1	4 L
L C011331	C011363	C	4ACSR	6.80Y	113.3	0.00	12.67	0.02	0	0	0	100	0.00	0.0	16.552	0	0	0	1	3 L
L C011330	C011331	C	4ACSR	6.80Y	113.3	0.00	12.67	0.02	0	0	0	100	0.00	0.0	16.623	0	0	0	2	2 L
L C011364	C011333	C	4ACSR	6.80Y	113.3	0.00	12.67	0.00	0	0	0	100	0.00	0.0	16.580	0	0	0	1	1 L
L C011334	C011167	C	4ACSR	6.80Y	113.3	0.00	12.67	3.86	3	26	-2	-100	0.00	0.0	16.224	0	0	0	1	4 L
L C011335	C011334	C	4ACSR	6.80Y	113.3	0.01	12.68	3.56	3	24	-2	-100	0.00	0.0	16.316	0	0	0	3	3 L
L C011238	C011180	C	4ACSR	6.83Y	113.8	0.01	12.20													

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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru	
L C011454	C011493	BC	6ACWC	6.88Y	114.6	0.01	11.36	0.50	0	7	-1	-99	0.00	0.0	15.277	0	0	0	9	L
L FSE1885	C011454	B	20 N FUSE	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.277	0	0	0	1	L
L C011466	FSE1885	B	4ACSR	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.419	0	0	0	1	L
L C011543	C011454	BC	6ACWC	6.88Y	114.6	0.00	11.36	0.50	0	7	-1	-99	0.00	0.0	15.399	0	0	0	8	L
L C011542	C011543	BC	6ACWC	6.88Y	114.6	0.00	11.36	0.50	0	7	-1	-99	0.00	0.0	15.416	0	0	0	1	L
L C011494	C011542	BC	6ACWC	6.88Y	114.6	0.00	11.36	0.50	0	7	-1	-99	0.00	0.0	15.532	0	0	0	7	L
L FSE1886	C011494	B	20 N FUSE	6.88Y	114.6	0.00	11.36	1.01	6	7	-1	-99	0.00	0.0	15.532	0	0	0	3	L
L C011516	FSE1886	B	4ACSR	6.88Y	114.6	0.00	11.37	1.01	1	7	-1	-99	0.00	0.0	15.641	0	0	0	1	L
L C011517	C011516	B	4ACSR	6.88Y	114.6	0.00	11.37	0.00	0	0	0	100	0.00	0.0	15.745	0	0	0	2	L
L FSE1887	C011494	B	20 N FUSE	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.532	0	0	0	2	L
L C011465	FSE1887	B	4ACSR	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.596	0	0	0	2	L
L FSE1888	C011494	B	20 N FUSE	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.532	0	0	0	2	L
L C011483	FSE1888	B	4ACSR	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.658	0	0	0	1	L
L C011484	C011483	B	4ACSR	6.88Y	114.6	0.00	11.36	0.00	0	0	0	100	0.00	0.0	15.699	0	0	0	1	L
L C012132	CO-1304761795	ABC	1/0ACSR	6.96Y	116.0	0.03	10.01	59.53	26	1242	-58	-100	0.34	0.0	11.364	0	0	0	294	L
L FSE1913	C012132	C	20 N FUSE	6.96Y	116.0	0.00	10.01	1.39	8	10	-1	-100	0.00	0.0	11.364	0	0	0	0	L
L C011992	FSE1913	C	2ACSR	6.96Y	116.0	0.00	10.01	1.39	1	10	-1	-100	0.00	0.0	11.383	0	0	0	0	L
L CO-878693716	C012132	ABC	2ACSR	6.92Y	115.3	0.70	10.72	59.07	33	1232	-57	-100	7.73	0.6	11.887	0	0	0	294	L
L CO-1193258934	CO-878693716	ABC	2ACSR	6.91Y	115.2	0.04	10.76	59.07	33	1224	-62	-100	0.42	0.0	11.915	0	0	0	294	L
L CO-1240420333	CO-1193258934	ABC	2ACSR	6.91Y	115.1	0.15	10.91	59.07	33	1224	-62	-100	1.67	0.1	12.029	0	0	0	294	L
L C013425	CO-1240420333	ABC	1/0ACSR	6.90Y	115.1	0.02	10.93	59.07	26	1222	-63	-100	0.23	0.0	12.053	0	0	0	294	L
L C013423	C013425	ABC	1/0ACSR	6.90Y	115.1	0.01	10.94	59.07	26	1222	-63	-100	0.17	0.0	12.071	0	0	0	294	L
L OC310879001	C013423	ABC	50 L OCR	6.90Y	115.1	0.00	10.94	59.07	118	1222	-64	-100	0.00	0.0	12.071	0	0	0	294	L
L OH310879002	OC310879001	ABC	1/0ACSR	6.90Y	115.0	0.01	10.95	59.07	26	1222	-64	-100	0.07	0.0	12.078	0	0	0	294	L
L FSE1892	OH310879002	C	20 N FUSE	6.90Y	115.0	0.00	10.95	7.12	40	49	-4	-100	0.00	0.0	12.078	0	0	0	9	L
L C013512	FSE1892	C	4ACSR	6.90Y	115.0	0.01	10.96	7.12	5	49	-4	-100	0.00	0.0	12.116	0	0	0	1	L
L C013513	C013512	C	4ACSR	6.90Y	115.0	0.03	10.99	5.53	4	38	-3	-100	0.01	0.0	12.262	0	0	0	6	L
L C013508	C013513	C	4ACSR	6.90Y	115.0	0.00	10.99	0.99	1	7	-1	-99	0.00	0.0	12.290	0	0	0	1	L
L C013507	C013508	C	4ACSR	6.90Y	115.0	0.00	10.99	0.00	0	0	0	100	0.00	0.0	12.338	0	0	0	1	L
L C013509	C013513	C	4ACSR	6.90Y	115.0	0.01	11.00	4.54	3	31	-2	-100	0.00	0.0	12.315	0	0	0	4	L
L C013511	C013509	C	4ACSR	6.90Y	115.0	0.01	11.02	4.54	3	31	-2	-100	0.00	0.0	12.392	0	0	0	4	L
L C013510	C013511	C	4ACSR	6.90Y	115.0	0.00	11.02	2.85	2	20	-1	-100	0.00	0.0	12.407	0	0	0	2	L
L CO-1732423687	C013511	C	2ACSR	6.90Y	115.0	0.00	11.02	1.68	1	12	-1	-100	0.00	0.0	12.503	0	0	0	2	L
L CO-1155307002	CO-1732423687	C	2ACSR	6.90Y	115.0	0.01	11.03	1.68	1	12	-1	-100	0.00	0.0	12.702	0	0	0	2	L
L CO825973816	CO-1155307002	C	2ACSR	6.90Y	115.0	0.00	11.03	0.00	0	0	0	100	0.00	0.0	12.762	0	0	0	1	L
L C013385	CO-1155307002	C	6ACWC	6.90Y	115.0	0.01	11.03	1.68	1	12	-1	-100	0.00	0.0	12.790	0	0	0	1	L
L C013401	C013512	C	2ACSR	6.90Y	115.0	0.00	10.96	0.82	0	6	0	100	0.00	0.0	12.161	0	0	0	2	L
L CO-1497565019	OH310879002	ABC	2ACSR	6.90Y	115.0	0.09	11.04	56.70	31	1173	-60	-100	0.93	0.1	12.147	0	0	0	285	L
L FSE1893	CO-1497565019	A	20 N FUSE	6.90Y	115.0	0.00	11.04	2.16	12	15	-1	-100	0.00	0.0	12.147	0	0	0	3	L
L C013400	FSE1893	A	2ACSR	6.90Y	115.0	0.00	11.04	2.16	1	15	-1	-100	0.00	0.0	12.198	0	0	0	3	L
L CO-1649253182	CO-1497565019	ABC	2ACSR	6.90Y	114.9	0.03	11.07	55.98	31	1157	-59	-100	0.35	0.0	12.173	0	0	0	3	L
L FSE1912	CO-1649253182	B	20 N FUSE	6.90Y	114.9	0.00	11.07	0.00	0	0	0	100	0.00	0.0	12.173	0	0	0	0	L
L C01652835023	FSE1912	B	2ACSR	6.90Y	114.9	0.00	11.07	0.00	0	0	0	100	0.00	0.0	12.220	0	0	0	0	L
L CO-251038377	CO-1649253182	ABC	2ACSR	6.89Y	114.9	0.07	11.14	55.51	31	1147	-59	-100	0.75	0.1	12.231	0	0	0	279	L
L FSE1894	CO-251038377	C	20 N FUSE	6.89Y	114.9	0.00	11.14	1.28	7	9	-1	-99	0.00	0.0	12.231	0	0	0	2	L
L C013428	FSE1894	C	2ACSR	6.89Y	114.9	0.00	11.15	1.28	1	9	-1	-99	0.00	0.0	12.325	0	0	0	2	L
L C013429	C013428	C	2ACSR	6.89Y	114.9	0.00	11.15	1.28	1	9	-1	-99	0.00	0.0	12.390	0	0	0	2	L
L C023622911	CO-251038377	ABC	2ACSR	6.88Y	114.7	0.19	11.33	55.08	31	1137	-59	-100	1.94	0.2	12.382	0	0	0	277	L
L FSE1895	C023622911	C	20 N FUSE	6.88Y	114.7	0.00	11.33	0.34	2	2	-1	-89	0.00	0.0	12.382	0	0	0	6	L
L C013366	FSE1895	C	6ACWC	6.88Y	114.7	0.00	11.33	0.34	0	2	-1	-89	0.00	0.0	12.463	0	0	0	4	L
L OH310879001	C013366	C	6ACWC	6.88Y	114.7	0.00	11.33	-0.07	0	0	0	100	0.00	0.0	12.689	0	0	0	2	L
L C013387	OH310879001	C	6ACWC	6.88Y	114.7	0.00	11.33	0.00	0	0	0	100	0.00	0.0	12.884	0	0	0	1	L
L C013388	OH310879001	C	1/0PRIURD	6.88Y	114.7	0.00	11.33	-0.07	0	0	0	100	0.00	0.0	12.797	0	0	0	1	L
L FSE1896	C023622911	A	20 N FUSE	6.88Y	114.7	0.00	11.33	3.24	18	22	-2	-100	0.00	0.0	12.382	0	0	0	5	L
L C013430	FSE1896	A	4ACSR	6.88Y	114.6	0.04	11.37	3.24	2	22	-2	-100	0.01	0.0	12.666	0	0	0	2	L
L C013431	C013430	A	4ACSR	6.88Y	114.6	0.01	11.38	2.95	2	20	-2	-100	0.00	0.0	12.746	0	0	0	3	L
L C013398	C013431	A	2ACSR	6.88Y	114.6	0.01	11.38	2.95	2	20	-2	-100	0.00	0.0	12.822	0	0	0	3	L
L C013390	C013398	A	4ACSR	6.88Y	114.6	0.01	11.39	2.95	2	20	-2	-100	0.00	0.0	12.870	0	0	0	1	L
L C030662	C013390	A	4ACSR	6.88Y	114.6	0.00	11.39	1.69	1	12	-1	-100	0.00	0.0	12.912	0	0	0	1	L
L C013389	C030662	A	4ACSR	6.88Y	114.6	0.00	11.39	0.00	0	0	0	100	0.00	0.0	12.964	0	0	0	1	L
L CO-827223594	C023622911	ABC	2ACSR	6.86Y	114.4	0.28	11.61	53.89	30	1111	-58	-100	2.80	0.3	12.610	0	0	0	266	L
L C013515	CO-827223594	ABC	1/0ACSR	6.86Y	114.3	0.04	11.65	53.89	23	1108	-59	-100	0.41	0.0	12.663	0	0	0	4	L
L FSE1897	C013515	A	20 N FUSE	6.86Y	114.3	0.00	11.65	0.00	0	0	0	100	0.00	0.0	12.663	0	0	0	1	L
L C013367	FSE1897	A	4ACSR	6.86Y	114.3	0.00	11.65	0.00	0	0	0	100	0.00	0.0	12.984	0	0	0	1	L
L CO668338916	C013515	ABC	2ACSR	6.84Y	114.0	0.39	12.04	53.81	30	1106	-60	-100	3.89	0.4	12.980	0	0	0	261	L
L CO-118966892	CO668338916	ABC	2ACSR	6.82Y	113.7	0.28	12.32	53.71	30	1100	-62	-100	2.76	0.3	13.206	0	0	0	3	L
L FSE1898	CO-118966892	A	20 N FUSE	6.82Y	113.7	0.00	12.32	26.57	149	181	-11	-100	0.00	0.0	13.206	0	0</			

Balanced Voltage Drop Report
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Summary

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L C013447	C013525	A	4ACSR	6.74Y	112.3	0.12	13.67	22.26	16	150	-10	-100	0.17	0.1	14.597	0	0	0	46	L	
L C013448	C013447	A	4ACSR	6.74Y	112.3	0.05	13.72	22.26	16	150	-10	-100	0.07	0.0	14.656	0	0	0	1	46	L
L C013449	C013448	A	4ACSR	6.72Y	112.0	0.27	13.99	22.26	16	150	-11	-100	0.37	0.2	14.957	0	0	0	1	45	L
L C013450	C013449	A	4ACSR	6.72Y	111.9	0.07	14.06	21.19	15	142	-10	-100	0.09	0.1	15.037	0	0	0	0	44	L
L C013451	C013450	A	4ACSR	6.72Y	111.9	0.00	14.06	0.00	0	0	0	100	0.00	0.0	15.123	0	0	0	0	1	L
L C013452	C013451	A	4ACSR	6.72Y	111.9	0.00	14.06	0.00	0	0	0	100	0.00	0.0	15.181	0	0	0	1	1	L
L OH310877003	C013450	A	4ACSR	6.71Y	111.9	0.05	14.11	21.19	15	142	-10	-100	0.07	0.1	15.101	0	0	0	0	43	L
L OH310877001	OH310877003	A	4ACSR	6.71Y	111.8	0.05	14.16	21.19	15	142	-10	-100	0.07	0.0	15.161	0	0	0	0	43	L
L OH310877001	OH310877002	A	4ACSR	6.71Y	111.8	0.04	14.20	21.19	15	142	-10	-100	0.05	0.0	15.206	0	0	0	0	43	L
L C013456	OH310877001	A	4ACSR	6.70Y	111.7	0.06	14.25	17.76	13	119	-9	-100	0.06	0.1	15.285	0	0	0	2	41	L
L C013359	C013456	A	6ACWC	6.70Y	111.7	0.03	14.31	11.62	8	78	-6	-100	0.02	0.0	15.342	0	0	0	0	25	L
L C013458	C013359	A	4ACSR	6.70Y	111.7	0.00	14.28	0.65	0	4	0	100	0.00	0.0	15.436	0	0	0	1	3	L
L C013459	C013458	A	4ACSR	6.70Y	111.7	0.00	14.28	0.65	0	4	0	100	0.00	0.0	15.507	0	0	0	2	2	L
L C01160095816	C013359	A	2ACSR	6.70Y	111.7	0.03	14.31	10.97	6	73	-5	-100	0.02	0.0	15.454	0	0	0	0	22	L
L C01705083695	C01160095816	A	2ACSR	6.70Y	111.7	0.00	14.31	1.57	1	11	-1	-100	0.00	0.0	15.506	0	0	0	1	1	L
L C0277212786	C01160095816	A	2ACSR	6.70Y	111.7	0.03	14.34	9.40	5	63	-5	-100	0.02	0.0	15.565	0	0	0	0	21	L
L C013461	C0277212786	A	6ACWC	6.70Y	111.6	0.02	14.35	9.40	7	63	-5	-100	0.01	0.0	15.609	0	0	0	1	21	L
L C013462	C013461	A	4ACSR	6.70Y	111.6	0.01	14.37	2.56	2	17	-1	-100	0.00	0.0	15.733	0	0	0	2	7	L
L C013465	C013462	A	4ACSR	6.70Y	111.6	0.01	14.38	2.56	2	17	-1	-100	0.00	0.0	15.863	0	0	0	1	5	L
L C013466	C013465	A	4ACSR	6.70Y	111.6	0.00	14.38	0.84	1	6	0	100	0.00	0.0	15.886	0	0	0	1	2	L
L C013464	C013466	A	4ACSR	6.70Y	111.6	0.00	14.38	0.00	0	0	0	100	0.00	0.0	15.955	0	0	0	0	1	L
L C013463	C013464	A	4ACSR	6.70Y	111.6	0.00	14.38	0.00	0	0	0	100	0.00	0.0	16.028	0	0	0	1	1	L
L C01476995629	C013465	A	2ACSR	6.70Y	111.6	0.01	14.39	1.70	1	11	-1	-100	0.00	0.0	16.018	0	0	0	1	2	L
L C0-152092475	C01476995629	A	2ACSR	6.70Y	111.6	0.00	14.39	0.00	0	0	0	100	0.00	0.0	16.076	0	0	0	1	1	L
L C017126	C013461	A	6ACWC	6.69Y	111.5	0.15	14.51	6.29	4	42	-3	-100	0.06	0.1	16.237	0	0	0	0	13	L
L C011451	C017126	A	6ACWC	6.69Y	111.5	0.01	14.52	6.29	4	42	-3	-100	0.01	0.0	16.290	0	0	0	1	13	L
L OH370206001	C011451	A	6ACWC	6.68Y	111.4	0.07	14.59	6.29	4	42	-3	-100	0.03	0.1	16.566	0	0	0	0	10	L
L C011461	OH370206001	A	4ACSR	6.68Y	111.4	0.00	14.59	0.00	0	0	0	100	0.00	0.0	16.803	0	0	0	1	1	L
L C011475	OH370206001	A	6ACWC	6.68Y	111.4	0.02	14.61	6.01	4	40	-3	-100	0.01	0.0	16.668	0	0	0	1	9	L
L C011476	C011475	A	6ACWC	6.68Y	111.3	0.06	14.67	5.57	4	37	-3	-100	0.02	0.1	16.953	0	0	0	0	8	L
L C011477	C011476	A	4ACSR	6.68Y	111.3	0.02	14.70	3.05	2	20	-2	-100	0.00	0.0	17.144	0	0	0	1	3	L
L C011478	C011477	A	4ACSR	6.68Y	111.3	0.00	14.70	2.60	2	17	-1	-100	0.00	0.0	17.168	0	0	0	1	2	L
L C011479	C011478	A	4ACSR	6.68Y	111.3	0.00	14.70	0.00	0	0	0	100	0.00	0.0	17.312	0	0	0	1	1	L
L C011510	C011476	A	4ACSR	6.68Y	111.3	0.00	14.68	2.52	2	17	-1	-100	0.00	0.0	17.000	0	0	0	1	4	L
L C011513	C011510	A	4ACSR	6.68Y	111.3	0.00	14.68	0.05	0	0	0	100	0.00	0.0	17.050	0	0	0	0	3	L
L C011462	C011513	A	4ACSR	6.68Y	111.3	0.00	14.68	0.05	0	0	0	100	0.00	0.0	17.124	0	0	0	1	1	L
L C011511	C011513	A	4ACSR	6.68Y	111.3	0.00	14.68	0.00	0	0	0	100	0.00	0.0	17.123	0	0	0	0	2	L
L C011512	C011511	A	4ACSR	6.68Y	111.3	0.00	14.68	0.00	0	0	0	100	0.00	0.0	17.142	0	0	0	1	1	L
L C011473	C011511	A	2ACSR	6.68Y	111.3	0.00	14.68	0.00	0	0	0	100	0.00	0.0	17.203	0	0	0	1	1	L
L C0-247639135	C011476	A	2ACSR	6.68Y	111.3	0.00	14.67	0.00	0	0	0	100	0.00	0.0	17.019	0	0	0	1	1	L
L C011460	C011451	A	4ACSR	6.69Y	111.5	0.00	14.52	0.00	0	0	0	100	0.00	0.0	16.337	0	0	0	2	2	L
L C013358	C013456	A	6ACWC	6.70Y	111.7	0.09	14.34	5.24	4	35	-3	-100	0.03	0.1	15.715	0	0	0	2	14	L
L C013455	C013358	A	6ACWC	6.70Y	111.6	0.01	14.35	4.87	3	33	-2	-100	0.00	0.0	15.761	0	0	0	1	11	L
L C013454	C013455	A	6ACWC	6.70Y	111.6	0.03	14.38	3.18	2	21	-2	-100	0.01	0.0	16.006	0	0	0	0	9	L
L C013453	C013454	A	6ACWC	6.70Y	111.6	0.01	14.39	3.18	2	21	-2	-100	0.00	0.0	16.105	0	0	0	0	9	L
L C013520	C013520	A	6ACWC	6.70Y	111.6	0.00	14.39	3.18	2	21	-2	-100	0.00	0.0	16.111	0	0	0	0	9	L
L OC384	C013520	A	10 H OCR	6.70Y	111.6	0.00	14.39	3.18	32	21	-2	-100	0.00	0.0	16.111	0	0	0	0	9	L
L C013521	OC384	A	6ACWC	6.70Y	111.6	0.02	14.41	3.18	2	21	-2	-100	0.00	0.0	16.269	0	0	0	0	9	L
L C013372	C013521	A	4ACSR	6.70Y	111.6	0.00	14.41	0.00	0	0	0	100	0.00	0.0	16.506	0	0	0	0	0	L
L C013357	C013521	A	6ACWC	6.69Y	111.6	0.03	14.44	3.18	2	21	-2	-100	0.01	0.0	16.519	0	0	0	0	9	L
L C013467	C013357	A	4ACSR	6.69Y	111.5	0.02	14.46	3.18	2	21	-2	-100	0.00	0.0	16.657	0	0	0	0	5	L
L C013468	C013467	A	4ACSR	6.69Y	111.5	0.01	14.47	3.18	2	21	-2	-100	0.00	0.0	16.756	0	0	0	0	5	L
L C013469	C013468	A	4ACSR	6.69Y	111.5	0.02	14.49	3.18	2	21	-2	-100	0.00	0.0	16.883	0	0	0	0	5	L
L C013470	C013469	A	4ACSR	6.69Y	111.5	0.01	14.50	1.53	1	10	-1	-100	0.00	0.0	17.015	0	0	0	0	4	L
L C013471	C013470	A	4ACSR	6.69Y	111.5	0.00	14.50	1.53	1	10	-1	-100	0.00	0.0	17.076	0	0	0	0	4	L
L C013475	C013471	A	4ACSR	6.69Y	111.5	0.01	14.52	1.53	1	10	-1	-100	0.00	0.0	17.319	0	0	0	0	4	L
L C013476	C013475	A	4ACSR	6.69Y	111.5	0.00	14.52	0.00	0	0	0	100	0.00	0.0	17.717	0	0	0	0	0	L
L C013472	C013475	A	2ACSR	6.69Y	111.5	0.00	14.52	1.53	1	10	-1	-100	0.00	0.0	17.407	0	0	0	1	4	L
L C013473	C013472	A	2ACSR	6.69Y	111.5	0.00	14.52	1.53	1	10	-1	-100	0.00	0.0	17.441	0	0	0	1	3	L
L C013474	C013473	A	2ACSR	6.69Y	111.5	0.00	14.52	1.53	1	10	-1	-100	0.00	0.0	17.521	0	0	0	2	2	L
L C013362	C013469	A	4ACSR	6.69Y	111.5	0.02	14.51	1.65	1	11	-1	-100	0.00	0.0	17.138	0	0	0	0	1	L
L C013380	C013362	A	4ACSR	6.69Y	111.5	0.00	14.51	0.00	0	0	0	100	0.00	0.0	17.246	0	0	0	0	0	L
L C013381	C013381	A	4ACSR	6.69Y	111.5	0.02	14.53	1.65	1	11	-1	-100	0.00	0.0	17.422	0	0	0	1	1	L
L C013529	C013357	A	6ACWC	6.69Y	111.6	0.00	14.44	0.00	0	0	0	100	0.00	0.0	16.918	0	0	0	0	4	L
L C013368	C013529	A	6ACWC	6.69Y	111.6	0.00	14.44	0.00	0	0	0	100	0.00	0.0	17.234	0	0	0	0	0	L
L SW389-B	C013368	A	Open	6.69Y	111.6	0.00	14.44	0.00	0	0	0	100	0.00	0.0	17.23						

Balanced Voltage Drop Report
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Summary

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L C011496	C011546	A	6ACWC	6.75Y	112.5	0.00	13.49	0.39	0	3	0	100	0.00	0.0	15.586	0	0	0	1	1	L
L OH370207002	C017125	A	6ACWC	6.75Y	112.5	0.00	13.47	0.00	0	0	0	100	0.00	0.0	14.925	0	0	0	0	0	L
L OH370208001	OH370207002	A	6ACWC	6.75Y	112.5	0.00	13.47	0.00	0	0	0	100	0.00	0.0	14.995	0	0	0	0	0	L
L OH370208002	OH370208001	A	6ACWC	6.75Y	112.5	0.00	13.47	0.00	0	0	0	100	0.00	0.0	15.195	0	0	0	0	0	L
L C013442	C013439	A	4ACSR	6.76Y	112.7	0.02	13.27	1.79	1	12	-1	-100	0.00	0.0	14.429	0	0	0	0	5	L
L C013443	C013442	A	4ACSR	6.76Y	112.7	0.00	13.27	1.79	1	12	-1	-100	0.00	0.0	14.486	0	0	0	2	5	L
L C013444	C013443	A	4ACSR	6.76Y	112.7	0.00	13.28	1.34	1	9	-1	-99	0.00	0.0	14.567	0	0	0	1	3	L
L C013445	C013444	A	4ACSR	6.76Y	112.7	0.00	13.28	1.34	1	9	-1	-99	0.00	0.0	14.659	0	0	0	2	2	L
L C013506	CO-118966892	ABC	1/0ACSR	6.82Y	113.6	0.04	12.36	44.85	20	916	-52	-100	0.37	0.0	13.275	0	0	0	2	198	L
L CO2064600554	C013506	ABC	2ACSR	6.79Y	113.2	0.44	12.80	44.85	25	916	-52	-100	3.72	0.4	13.712	0	0	0	0	196	L
L FSE1899	CO2064600554	B	20 N FUSE	6.79Y	113.2	0.00	12.80	0.00	0	0	0	100	0.00	0.0	13.712	0	0	0	0	0	L
L C013518	FSE1899	B	4ACSR	6.79Y	113.2	0.00	12.80	0.00	0	0	0	100	0.00	0.0	13.719	0	0	0	0	0	L
L FSE1900	CO2064600554	A	20 N FUSE	6.79Y	113.2	0.00	12.80	11.09	62	75	-6	-100	0.00	0.0	13.712	0	0	0	0	15	L
L C013370	FSE1900	A	6ACWC	6.79Y	113.1	0.06	12.86	11.09	8	75	-6	-100	0.04	0.1	13.854	0	0	0	2	15	L
L C013397	C013370	A	4ACSR	6.79Y	113.1	0.00	12.86	0.40	0	3	0	100	0.00	0.0	13.967	0	0	0	2	2	L
L C013485	C013370	A	6ACWC	6.79Y	113.1	0.02	12.88	9.99	7	68	-5	-100	0.01	0.0	13.898	0	0	0	0	11	L
L C013486	C013485	A	6ACWC	6.78Y	113.1	0.04	12.92	9.99	7	68	-5	-100	0.03	0.0	14.006	0	0	0	0	11	L
L C013504	C013486	A	4ACSR	6.78Y	113.0	0.04	12.96	9.99	7	68	-5	-100	0.02	0.0	14.100	0	0	0	0	10	L
L C013399	C013504	A	2ACSR	6.78Y	113.0	0.00	12.96	1.46	1	10	-1	-100	0.00	0.0	14.117	0	0	0	1	1	L
L C013505	C013504	A	4ACSR	6.78Y	113.0	0.03	12.99	8.53	6	58	-4	-100	0.02	0.0	14.200	0	0	0	0	9	L
L C013502	C013505	A	4ACSR	6.78Y	113.0	0.01	13.00	8.53	6	58	-4	-100	0.01	0.0	14.228	0	0	0	2	9	L
L C013503	C013502	A	4ACSR	6.78Y	113.0	0.01	13.02	8.53	6	58	-4	-100	0.01	0.0	14.270	0	0	0	0	7	L
L C013501	C013503	A	4ACSR	6.78Y	113.0	0.02	13.04	6.71	5	45	-3	-100	0.01	0.0	14.342	0	0	0	0	6	L
L C013499	C013501	A	4ACSR	6.78Y	113.0	0.01	13.04	6.71	5	45	-3	-100	0.00	0.0	14.365	0	0	0	2	6	L
L C013498	C013500	A	4ACSR	6.78Y	113.0	0.01	13.05	2.94	2	20	-1	-100	0.00	0.0	14.413	0	0	0	2	3	L
L CO-657583456	C013498	A	4ACSR	6.78Y	112.9	0.01	13.06	1.55	1	10	-1	-100	0.00	0.0	14.555	0	0	0	1	1	L
L C013396	C013500	A	2ACSR	6.78Y	113.0	0.00	13.04	1.54	1	10	-1	-100	0.00	0.0	14.402	0	0	0	1	1	L
L C013396	C013503	A	4ACSR	6.78Y	113.0	0.00	13.02	1.82	1	12	-1	-100	0.00	0.0	14.304	0	0	0	1	1	L
L C013526	C013486	A	6ACWC	6.78Y	113.1	0.00	12.92	0.00	0	0	0	100	0.00	0.0	14.049	0	0	0	0	0	L
L C013527	C013526	A	6ACWC	6.78Y	113.1	0.00	12.92	0.00	0	0	0	100	0.00	0.0	14.055	0	0	0	0	0	L
L SW389-A	C013527	A	Open	6.78Y	113.1	0.00	12.92	0.00	0	0	0	100	0.00	0.0	14.055	0	0	0	0	0	L
L C013393	C013486	A	4ACSR	6.78Y	113.1	0.00	12.92	0.00	0	0	0	100	0.00	0.0	14.271	0	0	0	1	1	L
L CO-1776761602	CO2064600554	ABC	2ACSR	6.77Y	112.9	0.31	13.11	41.16	23	837	-49	-100	2.36	0.3	14.041	0	0	0	0	181	L
L CO2112484479	CO-1776761602	ABC	2ACSR	6.76Y	112.7	0.17	13.28	41.16	23	835	-51	-100	1.33	0.2	14.226	0	0	0	0	181	L
L FSE1901	CO2112484479	A	20 N FUSE	6.76Y	112.7	0.00	13.28	0.00	0	0	0	100	0.00	0.0	14.226	0	0	0	0	1	L
L C013394	FSE1901	A	4ACSR	6.76Y	112.7	0.00	13.28	0.00	0	0	0	100	0.00	0.0	14.273	0	0	0	1	1	L
L CO604407734	CO2112484479	ABC	2ACSR	6.76Y	112.6	0.09	13.37	41.16	23	833	-51	-100	0.73	0.1	14.328	0	0	0	0	180	L
L CO-260507057	CO604407734	ABC	2ACSR	6.75Y	112.4	0.20	13.58	40.47	22	819	-51	-100	1.53	0.2	14.549	0	0	0	3	180	L
L OH310868001	CO-260507057	ABC	2ACSR	6.74Y	112.3	0.08	13.65	40.46	22	817	-52	-100	0.59	0.1	14.634	0	0	0	0	177	L
L FSE1911	OH310868001	C	20 N FUSE	6.74Y	112.3	0.00	13.65	0.87	5	6	0	100	0.00	0.0	14.634	0	0	0	0	1	L
L C013395	FSE1911	C	4ACSR	6.74Y	112.3	0.00	13.65	0.87	1	6	0	100	0.00	0.0	14.665	0	0	0	1	1	L
L CO994778840	OH310868001	ABC	2ACSR	6.74Y	112.3	0.10	13.75	39.87	22	805	-51	-100	0.72	0.1	14.740	0	0	0	0	176	L
L FSE1902	CO994778840	A	20 N FUSE	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	14.740	0	0	0	0	0	L
L FSE1910	CO994778840	C	20 N FUSE	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	14.740	0	0	0	0	0	L
L C017094	FSE1910	C	4ACSR	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	15.190	0	0	0	0	0	L
L C013582	C017094	C	4ACSR	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	15.285	0	0	0	0	0	L
L C013583	C017094	C	4ACSR	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	15.275	0	0	0	0	0	L
L CO-753821881	CO994778840	ABC	2ACSR	6.73Y	112.2	0.08	13.83	39.87	22	804	-52	-100	0.62	0.1	14.832	0	0	0	3	173	L
L CO2069782642	CO-753821881	ABC	2ACSR	6.72Y	112.0	0.21	14.04	38.35	21	773	-50	-100	1.53	0.2	15.078	0	0	0	0	170	L
L FSE1908	CO2069782642	C	20 N FUSE	6.72Y	112.0	0.00	14.04	0.72	4	5	0	100	0.00	0.0	15.078	0	0	0	0	1	L
L C013554	FSE1908	C	4ACSR	6.72Y	112.0	0.00	14.05	0.72	1	5	0	100	0.00	0.0	15.149	0	0	0	1	1	L
L FSE1909	CO2069782642	C	20 N FUSE	6.72Y	112.0	0.00	14.04	0.54	3	4	0	100	0.00	0.0	15.078	0	0	0	0	1	L
L C013555	FSE1909	C	4ACSR	6.72Y	112.0	0.00	14.04	0.54	0	4	0	100	0.00	0.0	15.125	0	0	0	1	1	L
L C013530	CO2069782642	ABC	1/0ACSR	6.72Y	111.9	0.02	14.06	37.93	16	763	-50	-100	0.12	0.0	15.110	0	0	0	1	168	L
L FSE1903	C013530	ABC	20 N FUSE	6.72Y	111.9	0.00	14.06	0.00	0	0	0	100	0.00	0.0	15.110	0	0	0	0	0	L
L C013629	FSE1903	A	4ACSR	6.72Y	111.9	0.00	14.06	0.00	0	0	0	100	0.00	0.0	15.214	0	0	0	0	0	L
L C017226	C013629	A	4ACSR	6.72Y	111.9	0.00	14.06	0.00	0	0	0	100	0.00	0.0	15.441	0	0	0	0	0	L
L C01749697684	C013530	ABC	2ACSR	6.71Y	111.8	0.16	14.23	37.93	21	763	-50	-100	1.17	0.2	15.303	0	0	0	0	167	L
L FSE1907	CO1749697684	C	20 N FUSE	6.71Y	111.8	0.00	14.23	3.89	22	26	-2	-100	0.00	0.0	15.303	0	0	0	0	2	L
L CO2142046166	FSE1907	C	2ACSR	6.71Y	111.8	0.01	14.24	3.89	2	26	-2	-100	0.00	0.0	15.403	0	0	0	2	2	L
L CO-973969714	CO1749697684	ABC	2ACSR	6.70Y	111.7	0.10	14.33	27.30	15	548	-36	-100	0.54	0.1	15.472	0	0	0	0	121	L
L C013535	CO-973969714	C	4ACSR	6.69Y	111.6	0.09	14.42	41.29	29	276	-18	-100	0.24	0.1	15.529	0	0	0	0	73	L
L C013701	C013535	C	4ACSR	6.69Y	111.6	0.01	14.43	38.89	28	260	-17	-100	0.02	0.0	15.536	0	0	0	0	69	L
L OC393	C013701	C	15 H OCR	6.69Y	111.6	0.00	14.43	38.89	259	260	-17	-100	0.00	0.0	15.536	0	0	0	0	69	L
L C013702	OC393	C	4ACSR	6.69Y	111.5	0.09	14.53	38.89	28	260	-17	-100	0.23	0.1	15.597	0	0				

Balanced Voltage Drop Report
Source: HILLSBORO

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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Units Displayed In Volts																						
-Base Voltage:120.0-																						
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru		
L C013693	C013680	C	4ACSR	6.64Y	110.6	0.00	15.37	0.00	0	0	0	100	0.00	0.0	16.591	0	0	0	0	0	L	
L C013694	C013693	C	4ACSR	6.64Y	110.6	0.00	15.37	0.00	0	0	0	100	0.00	0.0	16.598	0	0	0	0	0	0	L
L CO-938409196	C013679	C	2ACSR	6.64Y	110.6	0.00	15.36	0.00	0	0	0	100	0.00	0.0	16.369	0	0	0	0	0	0	L
L C013537	CO-1596632197	C	4ACSR	6.63Y	110.6	0.11	15.42	28.33	20	188	-13	-100	0.19	0.1	16.224	0	0	0	1	55	L	
L C013562	C013537	C	4ACSR	6.63Y	110.6	0.01	15.42	1.25	1	8	-1	-99	0.00	0.0	16.337	0	0	0	5	5	L	
L C013602	C013537	C	4ACSR	6.63Y	110.5	0.12	15.54	27.08	19	179	-13	-100	0.21	0.1	16.339	0	0	0	0	49	L	
L C013601	C013602	C	4ACSR	6.63Y	110.4	0.03	15.57	27.08	19	179	-13	-100	0.05	0.0	16.368	0	0	0	0	49	L	
L C013538	C013601	C	4ACSR	6.62Y	110.4	0.02	15.59	24.03	17	159	-11	-100	0.03	0.0	16.392	0	0	0	0	46	L	
L C013563	C013538	C	4ACSR	6.62Y	110.4	0.01	15.60	4.30	3	28	-2	-100	0.00	0.0	16.431	0	0	0	2	2	L	
L C013670	C013538	C	4ACSR	6.62Y	110.3	0.07	15.67	19.73	14	130	-9	-100	0.09	0.1	16.486	0	0	0	1	44	L	
L C013671	C013670	C	4ACSR	6.62Y	110.3	0.08	15.74	19.73	14	130	-9	-100	0.09	0.1	16.583	0	0	0	1	43	L	
L C013672	C013671	C	4ACSR	6.61Y	110.2	0.04	15.78	17.62	13	116	-8	-100	0.04	0.0	16.640	0	0	0	1	38	L	
L C013673	C013672	C	4ACSR	6.61Y	110.2	0.05	15.83	17.44	12	115	-8	-100	0.05	0.0	16.710	0	0	0	1	37	L	
L C013674	C013673	C	4ACSR	6.61Y	110.1	0.05	15.88	16.77	12	111	-8	-100	0.05	0.0	16.789	0	0	0	0	36	L	
L C013603	C013674	C	4ACSR	6.61Y	110.1	0.02	15.90	16.77	12	111	-8	-100	0.02	0.0	16.818	0	0	0	0	36	L	
L C013605	C013603	C	4ACSR	6.61Y	110.1	0.00	15.90	0.00	0	0	0	100	0.00	0.0	16.914	0	0	0	0	1	L	
L C013604	C013605	C	4ACSR	6.61Y	110.1	0.00	15.90	0.00	0	0	0	100	0.00	0.0	17.186	0	0	0	1	1	L	
L C013675	C013603	C	4ACSR	6.60Y	110.0	0.07	15.98	16.77	12	110	-8	-100	0.08	0.1	16.929	0	0	0	1	35	L	
L C013676	C013675	C	4ACSR	6.60Y	110.0	0.05	16.02	16.77	12	110	-8	-100	0.05	0.0	17.001	0	0	0	0	34	L	
L C013566	C013676	C	4ACSR	6.60Y	110.0	0.01	16.03	2.59	2	17	-1	-100	0.00	0.0	17.102	0	0	0	2	2	L	
L C013567	C013676	C	4ACSR	6.60Y	110.0	0.00	16.02	0.00	0	0	0	100	0.00	0.0	17.125	0	0	0	1	1	L	
L C013539	C013676	C	4ACSR	6.59Y	109.9	0.10	16.12	14.18	10	93	-7	-100	0.09	0.1	17.174	0	0	0	0	31	L	
L C013568	C013539	C	4ACSR	6.59Y	109.9	0.00	16.12	0.00	0	0	0	100	0.00	0.0	17.279	0	0	0	1	1	L	
L C013540	C013539	C	4ACSR	6.59Y	109.8	0.09	16.21	14.18	10	93	-7	-100	0.08	0.1	17.329	0	0	0	0	30	L	
L C013541	C013540	C	4ACSR	6.58Y	109.7	0.07	16.28	12.65	9	83	-6	-100	0.06	0.1	17.470	0	0	0	1	28	L	
L C013606	C013541	C	4ACSR	6.58Y	109.7	0.00	16.28	0.00	0	0	0	100	0.00	0.0	17.661	0	0	0	0	2	L	
L C013708	C013606	C	4ACSR	6.58Y	109.7	0.00	16.28	0.00	0	0	0	100	0.00	0.0	18.157	0	0	0	0	2	L	
L C013620	C013708	C	4ACSR	6.58Y	109.7	0.00	16.28	0.00	0	0	0	100	0.00	0.0	18.289	0	0	0	1	2	L	
L C013619	C013620	C	4ACSR	6.58Y	109.7	0.00	16.28	0.00	0	0	0	100	0.00	0.0	18.401	0	0	0	1	1	L	
L C013677	C013541	C	4ACSR	6.58Y	109.7	0.03	16.31	12.65	9	83	-6	-100	0.03	0.0	17.536	0	0	0	1	25	L	
L C013678	C013677	C	4ACSR	6.57Y	109.5	0.17	16.48	12.56	9	82	-6	-100	0.14	0.2	17.882	0	0	0	0	24	L	
L C017151	C013678	C	4ACSR	6.57Y	109.5	0.05	16.54	12.56	9	82	-6	-100	0.04	0.1	17.989	0	0	0	2	24	L	
L OH310438001	C017151	C	4ACSR	6.56Y	109.4	0.06	16.59	12.56	9	82	-6	-100	0.04	0.1	18.101	0	0	0	0	22	L	
L C013871	OH310438001	C	4ACSR	6.56Y	109.4	0.05	16.64	11.24	8	74	-5	-100	0.03	0.0	18.203	0	0	0	1	22	L	
L C013872	C013871	C	4ACSR	6.56Y	109.3	0.02	16.66	9.54	7	62	-5	-100	0.01	0.0	18.268	0	0	0	0	21	L	
L C013817	C013872	C	4ACSR	6.56Y	109.3	0.02	16.68	8.46	6	55	-4	-100	0.01	0.0	18.331	0	0	0	2	20	L	
L C013880	C013817	C	4ACSR	6.56Y	109.3	0.04	16.72	6.98	5	46	-3	-100	0.02	0.0	18.459	0	0	0	1	18	L	
L C013879	C013880	C	4ACSR	6.56Y	109.3	0.01	16.73	5.41	4	35	-3	-100	0.00	0.0	18.510	0	0	0	1	17	L	
L C013881	C013879	C	4ACSR	6.56Y	109.3	0.01	16.74	5.05	4	33	-2	-100	0.00	0.0	18.558	0	0	0	0	16	L	
L C013844	C013881	C	4ACSR	6.55Y	109.2	0.02	16.76	2.37	2	15	-1	-100	0.00	0.0	18.805	0	0	0	0	12	L	
L C013845	C013844	C	4ACSR	6.55Y	109.2	0.02	16.78	2.37	2	15	-1	-100	0.00	0.0	19.021	0	0	0	3	12	L	
L C013846	C013845	C	4ACSR	6.55Y	109.2	0.00	16.79	2.37	2	15	-1	-100	0.00	0.0	19.062	0	0	0	0	9	L	
L C013847	C013846	C	4ACSR	6.55Y	109.2	0.01	16.79	2.37	2	15	-1	-100	0.00	0.0	19.160	0	0	0	0	9	L	
L OH310438003	C013847	C	4ACSR	6.55Y	109.2	0.00	16.80	2.37	2	15	-1	-100	0.00	0.0	19.196	0	0	0	0	9	L	
L OH310438004	OH310438003	C	4ACSR	6.55Y	109.2	0.01	16.80	2.37	2	15	-1	-100	0.00	0.0	19.268	0	0	0	0	9	L	
L OH310438005	OH310438004	C	4ACSR	6.55Y	109.2	0.00	16.81	2.37	2	15	-1	-100	0.00	0.0	19.303	0	0	0	0	9	L	
L OH310438006	OH310438005	C	4ACSR	6.55Y	109.2	0.00	16.81	2.37	2	15	-1	-100	0.00	0.0	19.353	0	0	0	0	9	L	
L OH310438007	OH310438006	C	4ACSR	6.55Y	109.2	0.01	16.82	2.37	2	15	-1	-100	0.00	0.0	19.407	0	0	0	0	9	L	
L OH310439002	OH310438007	C	4ACSR	6.55Y	109.2	0.01	16.82	2.37	2	15	-1	-100	0.00	0.0	19.485	0	0	0	0	9	L	
L C013849	OH310439002	C	4ACSR	6.55Y	109.2	0.01	16.83	2.37	2	15	-1	-100	0.00	0.0	19.544	0	0	0	2	9	L	
L C013850	C013849	C	4ACSR	6.55Y	109.2	0.00	16.83	0.66	0	4	0	100	0.00	0.0	19.618	0	0	0	0	7	L	
L C013854	C013850	C	4ACSR	6.55Y	109.2	0.00	16.83	0.00	0	0	0	100	0.00	0.0	19.675	0	0	0	2	3	L	
L C013855	C013854	C	4ACSR	6.55Y	109.2	0.00	16.83	0.00	0	0	0	100	0.00	0.0	19.779	0	0	0	1	1	L	
L C013856	C013855	C	4ACSR	6.55Y	109.2	0.00	16.83	0.00	0	0	0	100	0.00	0.0	19.916	0	0	0	0	0	L	
L C013823	C013850	C	4ACSR	6.55Y	109.2	0.00	16.83	0.66	0	4	0	100	0.00	0.0	19.657	0	0	0	2	4	L	
L C013824	C013823	C	4ACSR	6.55Y	109.2	0.00	16.83	0.31	0	2	0	100	0.00	0.0	19.682	0	0	0	2	2	L	
L OH310439001	C013824	C	4ACSR	6.55Y	109.2	0.00	16.83	0.31	0	2	0	100	0.00	0.0	19.749	0	0	0	0	0	L	
L C013804	C013881	C	4ACSR	6.55Y	109.2	0.01	16.75	2.68	2	18	-1	-100	0.00	0.0	18.687	0	0	0	4	4	L	
L C013803	C013872	C	4ACSR	6.56Y	109.3	0.00	16.67	1.08	1	7	-1	-99	0.00	0.0	18.352	0	0	0	1	1	L	
L C013569	C013540	C	4ACSR	6.59Y	109.8	0.01	16.21	1.53	1	10	-1	-100	0.00	0.0	17.428	0	0	0	2	2	L	
L C013637	C013671	C	2ACSR	6.62Y	110.3	0.00	15.75	1.41	1	9	-1	-99	0.00	0.0	16.674	0	0	0	0	4	L	
L CO714247658	C013637	C	2ACSR	6.62Y	110.3	0.00	15.75	0.00	0	0	0	100	0.00	0.0	16.736	0	0	0	1	1	L	
L CO2010306892	C013637	C	2ACSR	6.61Y	110.2	0.01	15.75	1.41	1	9	-1	-99	0.00	0.0	16.873	0	0	0	0	3	L	
L C013636	CO2010306892	C	4ACSR	6.61Y	110.2	0.00	15.76	1.41	1	9	-1	-99	0.00	0.0	16.895	0	0	0	3	3	L	
L C013564	C013636	C	4ACSR	6.61Y	110.2	0.00	15.76	0.00	0	0	0	100	0.00	0.0	16.932	0	0	0	0	0	L	
L C013565	CO2010306892	C	4ACSR	6.61Y	110.2	0.00	15.75	0.00</														

Balanced Voltage Drop Report
Source: HILLSBORO

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L C017092	C013667	B	4ACSR	6.64Y	110.7	0.14	15.26	29.80	21	198	-14	-100	0.26	0.1	16.134	0	0	0	2	32	L
L C013487	C017092	B	4ACSR	6.64Y	110.7	0.08	15.33	27.80	20	184	-13	-100	0.14	0.1	16.205	0	0	0	0	30	L
L C013374	C013487	B	4ACSR	6.64Y	110.7	0.00	15.33	0.00	0	0	0	100	0.00	0.0	16.276	0	0	0	1	1	L
L C013360	C013487	B	4ACSR	6.64Y	110.6	0.06	15.39	27.80	20	184	-13	-100	0.10	0.1	16.256	0	0	0	1	29	L
L C013488	C013360	B	4ACSR	6.63Y	110.4	0.19	15.58	23.16	17	153	-11	-100	0.28	0.2	16.466	0	0	0	2	26	L
L C059650245	C013488	B	2ACSR	6.62Y	110.3	0.08	15.66	22.27	12	147	-11	-100	0.12	0.1	16.610	0	0	0	0	24	L
L C070533784	C059650245	B	2ACSR	6.62Y	110.3	0.02	15.68	20.38	11	135	-10	-100	0.02	0.0	16.641	0	0	0	0	23	L
L C013377	C070533784	B	4ACSR	6.62Y	110.3	0.00	15.69	1.23	1	8	-1	-99	0.00	0.0	16.734	0	0	0	3	3	L
L C013361	C070533784	B	4ACSR	6.61Y	110.2	0.08	15.76	16.83	12	111	-8	-100	0.09	0.1	16.767	0	0	0	1	20	L
L C013378	C013361	B	4ACSR	6.61Y	110.2	0.01	15.77	2.65	2	17	-1	-100	0.00	0.0	16.818	0	0	0	2	2	L
L C013490	C013361	B	4ACSR	6.61Y	110.2	0.01	15.77	14.19	10	94	-7	-100	0.01	0.0	16.779	0	0	0	6	17	L
L C013495	C013490	B	4ACSR	6.61Y	110.2	0.05	15.82	7.73	6	51	-4	-100	0.02	0.0	16.945	0	0	0	1	11	L
L C013494	C013495	B	4ACSR	6.61Y	110.1	0.04	15.86	4.82	3	32	-2	-100	0.01	0.0	17.158	0	0	0	2	7	L
L C013493	C013494	B	4ACSR	6.61Y	110.1	0.01	15.87	2.66	2	18	-1	-100	0.00	0.0	17.232	0	0	0	1	5	L
L C013492	C013493	B	4ACSR	6.61Y	110.1	0.01	15.88	2.66	2	18	-1	-100	0.00	0.0	17.366	0	0	0	1	4	L
L C013491	C013492	B	4ACSR	6.61Y	110.1	0.01	15.89	2.66	2	18	-1	-100	0.00	0.0	17.464	0	0	0	3	3	L
L C0-1956241423	C013495	B	2ACSR	6.61Y	110.2	0.01	15.83	2.25	1	15	-1	-100	0.00	0.0	17.050	0	0	0	0	3	L
L C0-978084133	C0-1956241423	B	2ACSR	6.61Y	110.2	0.00	15.83	2.25	1	15	-1	-100	0.00	0.0	17.097	0	0	0	3	3	L
L C01453384382	C059650245	B	2ACSR	6.62Y	110.3	0.00	15.67	1.89	1	12	-1	-100	0.00	0.0	16.659	0	0	0	1	1	L
L C013375	C013360	B	4ACSR	6.64Y	110.6	0.01	15.40	4.65	3	31	-2	-100	0.00	0.0	16.298	0	0	0	2	2	L
L C013376	C013360	B	4ACSR	6.64Y	110.6	0.00	15.39	0.00	0	0	0	100	0.00	0.0	16.340	0	0	0	0	0	L
L C013556	C013532	B	4ACSR	6.66Y	111.0	0.00	14.97	1.25	1	8	-1	-99	0.00	0.0	15.960	0	0	0	1	1	L
L C013533	C013666	B	4ACSR	6.66Y	111.1	0.06	14.94	7.86	6	52	-4	-100	0.03	0.1	16.007	0	0	0	0	12	L
L C013557	C013533	B	4ACSR	6.66Y	111.1	0.00	14.94	0.00	0	0	0	100	0.00	0.0	16.078	0	0	0	1	1	L
L C013534	C013533	B	4ACSR	6.66Y	111.0	0.04	14.98	7.86	6	52	-4	-100	0.02	0.0	16.144	0	0	0	0	11	L
L C013595	C013534	B	4ACSR	6.66Y	111.0	0.03	15.01	4.43	3	29	-2	-100	0.01	0.0	16.316	0	0	0	0	9	L
L C013594	C013595	B	4ACSR	6.66Y	110.9	0.05	15.06	4.43	3	29	-2	-100	0.01	0.0	16.587	0	0	0	1	9	L
L C013631	C013594	B	4ACSR	6.66Y	110.9	0.00	15.06	0.87	1	6	0	100	0.00	0.0	16.688	0	0	0	1	2	L
L C013630	C013631	B	4ACSR	6.66Y	110.9	0.00	15.07	0.80	1	5	0	100	0.00	0.0	16.719	0	0	0	1	1	L
L C013597	C013594	B	4ACSR	6.66Y	110.9	0.02	15.08	3.52	3	23	-2	-100	0.00	0.0	16.720	0	0	0	1	5	L
L C013596	C013597	B	4ACSR	6.65Y	110.9	0.01	15.09	3.03	2	20	-2	-100	0.00	0.0	16.779	0	0	0	0	4	L
L C013668	C013596	B	4ACSR	6.65Y	110.9	0.01	15.09	3.03	2	20	-2	-100	0.00	0.0	16.830	0	0	0	1	4	L
L C017093	C013668	B	4ACSR	6.65Y	110.9	0.02	15.11	2.98	2	20	-1	-100	0.00	0.0	17.015	0	0	0	0	3	L
L C013497	C017093	B	4ACSR	6.65Y	110.9	0.01	15.12	2.98	2	20	-1	-100	0.00	0.0	17.063	0	0	0	1	3	L
L C013496	C013497	B	4ACSR	6.65Y	110.9	0.01	15.13	0.66	0	4	0	100	0.00	0.0	17.497	0	0	0	2	2	L
L C013379	C013594	B	4ACSR	6.66Y	110.9	0.00	15.06	0.04	0	0	0	100	0.00	0.0	16.730	0	0	0	1	1	L
L C013633	C013534	B	4ACSR	6.66Y	111.0	0.02	15.00	3.43	2	23	-2	-100	0.00	0.0	16.261	0	0	0	1	2	L
L C013632	C013633	B	4ACSR	6.66Y	111.0	0.01	15.01	1.84	1	12	-1	-100	0.00	0.0	16.410	0	0	0	1	1	L
L C013703	C01749697684	C	4ACSR	6.71Y	111.8	0.01	14.23	27.99	20	187	-13	-100	0.01	0.0	15.309	0	0	0	0	44	L
L OC505	C013703	C	15 H OCR	6.71Y	111.8	0.00	14.23	27.99	187	187	-13	-100	0.00	0.0	15.309	0	0	0	0	44	L
L C013704	OC505	C	4ACSR	6.70Y	111.7	0.09	14.32	27.99	20	187	-13	-100	0.16	0.1	15.392	0	0	0	1	44	L
L C013654	C013704	C	4ACSR	6.69Y	111.5	0.18	14.50	27.59	20	184	-13	-100	0.31	0.2	15.556	0	0	0	2	43	L
L C013710	C013654	C	4ACSR	6.68Y	111.3	0.16	14.66	25.64	18	171	-12	-100	0.25	0.1	15.709	0	0	0	0	41	L
L C013657	C013710	C	4ACSR	6.67Y	111.2	0.16	14.82	21.98	16	146	-10	-100	0.22	0.1	15.892	0	0	0	1	36	L
L C013658	C013657	C	4ACSR	6.65Y	110.9	0.28	15.10	20.98	15	140	-10	-100	0.37	0.3	16.230	0	0	0	0	35	L
L C013550	C013658	C	4ACSR	6.64Y	110.6	0.26	15.36	18.90	13	125	-9	-100	0.31	0.2	16.576	0	0	0	0	29	L
L C013549	C013550	C	4ACSR	6.64Y	110.6	0.05	15.40	16.07	11	106	-8	-100	0.05	0.0	16.652	0	0	0	2	26	L
L C013646	C013549	C	4ACSR	6.63Y	110.5	0.05	15.45	8.86	6	59	-4	-100	0.03	0.0	16.786	0	0	0	0	5	L
L C013692	C013646	C	4ACSR	6.63Y	110.5	0.01	15.46	8.86	6	59	-4	-100	0.01	0.0	16.818	0	0	0	3	5	L
L C013645	C013692	C	4ACSR	6.63Y	110.5	0.00	15.46	3.70	3	24	-2	-100	0.00	0.0	16.832	0	0	0	0	2	L
L C013644	C013645	C	4ACSR	6.63Y	110.5	0.01	15.47	3.70	3	24	-2	-100	0.00	0.0	16.878	0	0	0	2	2	L
L C013659	C013549	C	4ACSR	6.63Y	110.6	0.01	15.42	6.90	5	46	-3	-100	0.01	0.0	16.705	0	0	0	1	19	L
L C013660	C013659	C	4ACSR	6.63Y	110.6	0.01	15.43	5.50	4	36	-3	-100	0.00	0.0	16.746	0	0	0	0	18	L
L C013548	C013660	C	4ACSR	6.63Y	110.5	0.07	15.50	4.03	3	27	-2	-100	0.02	0.1	17.172	0	0	0	0	15	L
L C013547	C013548	C	4ACSR	6.63Y	110.5	0.03	15.53	3.91	3	26	-2	-100	0.01	0.0	17.385	0	0	0	2	13	L
L C013574	C013547	C	4ACSR	6.63Y	110.5	0.00	15.53	0.49	0	3	0	100	0.00	0.0	17.504	0	0	0	1	1	L
L C013622	C013547	C	4ACSR	6.63Y	110.5	0.01	15.54	2.32	2	15	-1	-100	0.00	0.0	17.470	0	0	0	0	10	L
L C013621	C013622	C	4ACSR	6.63Y	110.5	0.00	15.54	2.32	2	15	-1	-100	0.00	0.0	17.504	0	0	0	0	10	L
L C013545	C013621	C	4ACSR	6.63Y	110.5	0.00	15.54	0.00	0	0	0	100	0.00	0.0	17.876	0	0	0	0	1	L
L C013663	C013545	C	4ACSR	6.63Y	110.5	0.00	15.54	0.00	0	0	0	100	0.00	0.0	17.952	0	0	0	1	1	L
L C013664	C013663	C	4ACSR	6.63Y	110.5	0.00	15.54	0.00	0	0	0	100	0.00	0.0	17.970	0	0	0	0	0	L
L C013572	C013545	C	4ACSR	6.63Y	110.5	0.00	15.54	0.00	0	0	0	100	0.00	0.0	18.066	0	0	0	0	0	L
L C013546	C013621	C	4ACSR	6.63Y	110.5	0.01	15.55	2.32	2	15	-1	-100	0.00	0.0	17.615	0	0	0	0	9	L
L C013573	C013546	C	4ACSR	6.63Y	110.4	0.00	15.55	0.24	0	2	0	100	0.00	0.0	17.908	0	0	0	2	2	L
L C013641	C013546	C	4ACSR	6.63Y	110.4	0.01	15.56	2.08	1	14	-1	-100	0.00	0.0	17.686	0	0	0	0	7	L
L C013640	C013641	C	4ACSR	6.63Y	110.4	0.00	15.56	2.08	1	14	-1	-1									

Balanced Voltage Drop Report
Source: HILLSBORO

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru
L	CO13623		C 4ACSR	6.65Y	110.9	0.00	15.10	0.00	0	0	0	100	0.00	0.0	16.775	0	0	0	3	L
L	CO13580		C 4ACSR	6.65Y	110.9	0.00	15.10	0.00	0	0	0	100	0.00	0.0	16.846	0	0	0	2	L
L	CO13648		C 4ACSR	6.65Y	110.9	0.00	15.10	0.00	0	0	0	100	0.00	0.0	16.893	0	0	0	0	L
L	CO13647		C 4ACSR	6.65Y	110.9	0.00	15.10	0.00	0	0	0	100	0.00	0.0	16.989	0	0	0	1	L
L	CO13589		C 2ACSR	6.65Y	110.9	0.00	15.10	0.41	0	3	0	100	0.00	0.0	16.448	0	0	0	1	L
L	CO13581		C 4ACSR	6.65Y	110.9	0.00	15.10	1.67	1	11	-1	-100	0.00	0.0	16.278	0	0	0	1	L
L	CO13650		C 4ACSR	6.68Y	111.3	0.01	14.67	3.66	3	24	-2	-100	0.00	0.0	15.809	0	0	0	2	L
L	CO13649		C 4ACSR	6.68Y	111.3	0.01	14.69	3.27	2	22	-2	-100	0.00	0.0	15.906	0	0	0	0	L
L	CO13655		C 4ACSR	6.68Y	111.3	0.02	14.71	3.27	2	22	-2	-100	0.00	0.0	16.083	0	0	0	2	L
L	CO13656		C 4ACSR	6.68Y	111.3	0.00	14.71	1.25	1	8	-1	-99	0.00	0.0	16.119	0	0	0	1	L
L	CO17227	CO994778840	A 4ACSR	6.74Y	112.3	0.00	13.75	0.00	0	0	0	100	0.00	0.0	14.859	0	0	0	3	L
L	CO12101	CO-1304761795	B 2ACSR	6.96Y	116.0	0.00	9.98	0.03	0	0	0	100	0.00	0.0	11.339	0	0	0	3	L
P	CO-51914280	CO10604	A 2ACSR	7.24Y	120.7	0.00	5.25	-0.07	0	0	0	100	0.00	0.0	10.530	0	0	0	0	P
P	CO1045244695	CO-51914280	A 1/OPRIURD	7.24Y	120.7	0.00	5.25	-0.07	0	0	0	100	0.00	0.0	10.638	0	0	0	1	P
P	CAP56	CO12055	ABC Cap (300)	14.72Y	122.7	0.00	3.30	-7.10	0	0	-314	0	0.00	0.0	7.722	0	0	0	0	P

----- Feeder No. 0 (Poplar Plains) Beginning with Device OC163 -----

----- Feeder No. 0 (Ringos) Beginning with Device OC165 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total			
KW	11599	80	0	0	0	0	462		0.00	12141	Lowest Voltage =	109.17	on Element OH310439001
KVAR	515	15	-314	-11	0	0	644			850	Max Accm VoltD =	16.83	on Element OH310439001
											Max Elem VoltD =	7.27	on Element RG1260263416

Balanced Voltage Drop Report
Source: FLEMINGSBURG

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	KVAR	Cons On	Cons Thru
FLEMINGSBURG		ABC	FLEMINGSBU	15.12Y	126.0	0.00	0.00	523.50	0	23487	3498	99	0.00	0.0	0.000	0	0	0	0	3012
----- Feeder No. 0 (Hospital) Beginning with Device OC470 -----																				
----- Feeder No. 0 (Toyo Seat) Beginning with Device OC469 -----																				
----- Feeder No. 0 (Cowan) Beginning with Device OC468 -----																				
P CA36	CO30673	ABC	Cap (300)	14.85Y	123.7	0.00	2.28	-7.16	0	0	-319	0	0.00	0.0	9.322	0	0	0	0	0 P
P CO15232	CO15348	ABC	1/0PRIURD	15.11Y	125.9	0.00	0.07	-0.03	0	0	-1	0	0.00	0.0	0.190	0	0	0	1	1 P
----- Feeder No. 0 (Tilton) Beginning with Device OC467 -----																				
L CO12466	CO12436	B	4ACSR	6.99Y	116.5	0.56	9.53	58.04	41	408	6	100	1.94	0.5	9.464	0	0	0	0	89 L
L CO12465	CO12466	B	4ACSR	6.98Y	116.3	0.15	9.67	58.04	41	406	5	100	0.51	0.1	9.525	0	0	0	0	89 L
L CO12464	CO12465	B	4ACSR	6.98Y	116.3	0.00	9.67	0.03	0	0	0	100	0.00	0.0	9.545	0	0	0	0	2 L
L CO12462	CO12464	B	4ACSR	6.98Y	116.3	0.00	9.67	0.03	0	0	0	100	0.00	0.0	9.752	0	0	0	1	2 L
L CO12463	CO12462	B	4ACSR	6.98Y	116.3	0.00	9.67	0.03	0	0	0	100	0.00	0.0	9.831	0	0	0	1	1 L
L CO12441	CO12465	B	4ACSR	6.97Y	116.2	0.12	9.79	58.01	41	405	4	100	0.41	0.1	9.574	0	0	0	0	87 L
L CO12439	CO12441	B	4ACSR	6.97Y	116.1	0.10	9.89	58.01	41	404	4	100	0.33	0.1	9.614	0	0	0	0	87 L
L CO12440	CO12439	B	4ACSR	6.96Y	116.0	0.14	10.02	58.01	41	404	4	100	0.47	0.1	9.670	0	0	0	0	87 L
L CO12356	CO12440	B	4ACSR	6.96Y	116.0	0.00	10.03	0.77	1	5	0	100	0.00	0.0	9.797	0	0	0	1	1 L
L CO12327	CO12440	B	4ACSR	6.94Y	115.6	0.35	10.37	57.24	41	398	4	100	1.19	0.3	9.816	0	0	0	0	86 L
L CO12499	CO12327	B	4ACSR	6.93Y	115.5	0.10	10.47	23.82	17	165	1	100	0.14	0.1	9.914	0	0	0	0	19 L
L CO12495	CO12499	B	4ACSR	6.92Y	115.4	0.14	10.61	23.82	17	165	1	100	0.20	0.1	10.058	0	0	0	1	19 L
L CO12498	CO12495	B	4ACSR	6.92Y	115.3	0.09	10.70	22.28	16	154	0	100	0.12	0.1	10.153	0	0	0	0	18 L
L CO12496	CO12498	B	4ACSR	6.91Y	115.2	0.06	10.75	22.28	16	154	0	100	0.07	0.0	10.213	0	0	0	0	18 L
L CO12497	CO12496	B	4ACSR	6.91Y	115.1	0.11	10.87	22.28	16	154	0	100	0.15	0.1	10.334	0	0	0	2	18 L
L CO17062	CO12497	B	4ACSR	6.90Y	115.1	0.08	10.95	16.62	12	115	0	100	0.08	0.1	10.452	0	0	0	1	16 L
L CO12102	CO17062	B	4ACSR	6.90Y	115.0	0.03	10.98	16.62	12	115	0	100	0.03	0.0	10.499	0	0	0	0	15 L
L CO11993	CO12102	B	2ACSR	6.90Y	115.0	0.00	10.98	1.88	1	13	0	100	0.00	0.0	10.547	0	0	0	1	1 L
L CO12103	CO12102	B	4ACSR	6.90Y	115.0	0.01	10.99	14.74	11	102	0	100	0.01	0.0	10.522	0	0	0	1	14 L
L OH320764001	CO12103	B	4ACSR	6.90Y	115.0	0.01	11.01	14.65	10	101	0	100	0.01	0.0	10.542	0	0	0	0	13 L
L CO12078	OH320764001	B	2ACSR	6.90Y	115.0	0.00	11.01	1.24	1	9	0	100	0.00	0.0	10.631	0	0	0	0	1 L
L CO12079	CO12078	B	2ACSR	6.90Y	115.0	0.00	11.01	1.24	1	9	0	100	0.00	0.0	10.689	0	0	0	1	1 L
L CO12063	OH320764001	B	4ACSR	6.90Y	115.0	0.03	11.03	13.42	10	93	0	100	0.02	0.0	10.589	0	0	0	1	12 L
L OH320764002	CO12063	B	4ACSR	6.90Y	114.9	0.05	11.08	11.46	8	79	0	100	0.04	0.0	10.697	0	0	0	0	11 L
L CO17063	OH320764002	B	4ACSR	6.89Y	114.9	0.02	11.11	11.46	8	79	0	100	0.02	0.0	10.748	0	0	0	0	11 L
L CO12426	CO17063	B	4ACSR	6.89Y	114.8	0.07	11.18	11.46	8	79	0	100	0.05	0.1	10.904	0	0	0	0	11 L
L CO12433	CO12426	B	2ACSR	6.89Y	114.8	0.02	11.20	11.46	6	79	0	100	0.02	0.0	10.978	0	0	0	0	10 L
L CO12432	CO12433	B	2ACSR	6.89Y	114.8	0.04	11.24	11.46	6	79	0	100	0.03	0.0	11.104	0	0	0	0	10 L
L CO12363	CO12432	B	2ACSR	6.89Y	114.8	0.00	11.25	2.18	1	15	0	100	0.00	0.0	11.146	0	0	0	1	1 L
L CO12330	CO12432	B	2ACSR	6.88Y	114.7	0.02	11.26	7.18	4	49	0	100	0.01	0.0	11.197	0	0	0	0	7 L
L CO12358	CO12330	B	4ACSR	6.88Y	114.7	0.00	11.27	2.79	2	19	0	100	0.00	0.0	11.235	0	0	0	2	2 L
L CO12331	CO12330	B	2ACSR	6.88Y	114.7	0.01	11.27	4.39	2	30	0	100	0.00	0.0	11.249	0	0	0	0	5 L
L CO12359	CO12331	B	2ACSR	6.88Y	114.7	0.00	11.27	2.50	1	17	0	100	0.00	0.0	11.300	0	0	0	2	2 L
L CO12427	CO12331	B	2ACSR	6.88Y	114.7	0.00	11.27	1.89	1	13	0	100	0.00	0.0	11.306	0	0	0	0	3 L
L CO12431	CO12427	B	2ACSR	6.88Y	114.7	0.00	11.28	1.89	1	13	0	100	0.00	0.0	11.376	0	0	0	1	3 L
L CO12428	CO12431	B	2ACSR	6.88Y	114.7	0.00	11.28	1.89	1	13	0	100	0.00	0.0	11.416	0	0	0	0	2 L
L CO12430	CO12428	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.527	0	0	0	0	1 L
L CO12429	CO12430	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.759	0	0	0	0	1 L
L CO12360	CO12429	B	4ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.808	0	0	0	1	1 L
L CO12458	CO12429	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.782	0	0	0	0	0 L
L CO12456	CO12458	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.819	0	0	0	0	0 L
L CO12457	CO12456	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	11.861	0	0	0	0	0 L
L CO-527725602	CO12428	B	2ACSR	6.88Y	114.7	0.01	11.28	1.89	1	13	0	100	0.00	0.0	11.528	0	0	0	1	1 L
L CO12357	CO12432	B	2ACSR	6.89Y	114.8	0.00	11.25	2.11	1	14	0	100	0.00	0.0	11.156	0	0	0	2	2 L
L CO12459	CO12426	B	2ACSR	6.89Y	114.8	0.00	11.18	0.00	0	0	0	100	0.00	0.0	10.973	0	0	0	1	1 L
L CO12391	CO12327	B	4ACSR	6.94Y	115.6	0.01	10.38	33.42	24	232	2	100	0.02	0.0	9.823	0	0	0	0	67 L
L OC346	CO12391	B	15 H OCR	6.94Y	115.6	0.00	10.38	33.42	223	232	2	100	0.00	0.0	9.823	0	0	0	0	67 L
L CO12392	OC346	B	4ACSR	6.90Y	115.0	0.58	10.96	33.42	24	232	2	100	1.15	0.5	10.237	0	0	0	0	67 L
L CO12393	CO12392	B	4ACSR	6.90Y	115.0	0.06	11.02	33.42	24	231	2	100	0.13	0.1	10.284	0	0	0	0	66 L
L CO12394	CO12393	B	4ACSR	6.89Y	114.9	0.07	11.10	33.42	24	231	2	100	0.15	0.1	10.336	0	0	0	1	66 L
L CO12444	CO12394	B	4ACSR	6.89Y	114.9	0.00	11.10	0.87	1	6	0	100	0.00	0.0	10.374	0	0	0	0	2 L
L CO12442	CO12444	B	4ACSR	6.89Y	114.9	0.00	11.10	0.87	1	6	0	100	0.00	0.0	10.424	0	0	0	0	2 L
L CO12443	CO12442	B	4ACSR	6.89Y	114.9	0.00	11.10	0.87	1	6	0	100	0.00	0.0	10.489	0	0	0	2	2 L
L CO12434	CO12394	B	4ACSR	6.87Y	114.5	0.42	11.52	31.48	22	217	2	100	0.79	0.4	10.659	0	0	0	0	63 L
L CO12435	CO12434	B	4ACSR	6.86Y	114.4	0.07	11.59	31.48	22	216	1	100	0.14	0.1	10.716	0	0	0	1	63 L
L CO12451	CO12435	B	4ACSR	6.86Y	114.4	0.00	11.60	2.31	2	16	0	100	0.00	0.0	10.766	0	0	0	1	3 L

Balanced Voltage Drop Report
Source: FLEMINGSBURG

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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Units Displayed In Volts																														
-Base Voltage:120.0-																														
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru											
L	CO12032	CO12031	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.224	0	0	0	1	2	L								
L	CO12033	CO12032	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.278	0	0	0	0	0	1	L							
L	CO12034	CO12033	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.310	0	0	0	0	0	0	1	L						
L	CO12035	CO12034	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.501	0	0	0	0	0	0	0	1	L					
L	CO12036	CO12035	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.595	0	0	0	0	0	0	0	0	1	L				
L	CO12037	CO12036	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.669	0	0	0	0	0	0	0	0	0	1	L			
L	CO12038	CO12037	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.744	0	0	0	0	0	0	0	0	0	0	1	L		
L	CO12039	CO12038	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.859	0	0	0	0	0	0	0	0	0	0	1	L		
L	CO12133	CO12031	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.280	0	0	0	0	0	0	0	0	0	0	2	L		
L	CO11976	CO12133	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.340	0	0	0	0	0	0	0	0	0	0	1	1	L	
L	CO12134	CO12133	B	4ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.388	0	0	0	0	0	0	0	0	0	0	1	1	L	
L	CO608781709	CO371685969	B	2ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.278	0	0	0	0	0	0	0	0	0	0	1	1	L	
L	OH320763003	CO608781709	B	2ACSR	6.86Y	114.4	0.00	11.65	0.00	0	0	0	100	0.00	0.0	11.361	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO-1253669342	SW-380916054-A	B	2ACSR	6.84Y	114.1	0.28	11.93	28.94	16	199	1	100	0.49	0.2	11.140	0	0	0	0	0	0	0	0	0	0	1	54	L	
L	CO12080	CO-1253669342	B	2ACSR	6.84Y	114.0	0.08	12.00	27.78	15	190	1	100	0.13	0.1	11.240	0	0	0	0	0	0	0	0	0	0	1	53	L	
L	OH320763001	CO12080	B	2ACSR	6.84Y	113.9	0.07	12.07	26.25	15	180	0	100	0.10	0.1	11.332	0	0	0	0	0	0	0	0	0	0	0	52	L	
L	CO12081	OH320763001	B	2ACSR	6.83Y	113.9	0.07	12.14	26.25	15	179	0	100	0.11	0.1	11.430	0	0	0	0	0	0	0	0	0	0	0	52	L	
L	CO12087	CO12081	B	2ACSR	6.83Y	113.8	0.03	12.17	26.25	15	179	0	100	0.05	0.0	11.476	0	0	0	0	0	0	0	0	0	0	0	52	L	
L	CO12086	CO12087	B	2ACSR	6.83Y	113.8	0.03	12.21	25.42	14	174	0	100	0.05	0.0	11.523	0	0	0	0	0	0	0	0	0	0	0	52	L	
L	CO12082	CO12086	B	2ACSR	6.82Y	113.7	0.07	12.27	25.42	14	174	0	100	0.10	0.1	11.619	0	0	0	0	0	0	0	0	0	0	1	52	L	
L	CO12115	CO12082	B	4ACSR	6.82Y	113.7	0.04	12.31	21.04	15	144	0	100	0.04	0.0	11.660	0	0	0	0	0	0	0	0	0	0	0	44	L	
L	CO12091	CO12115	B	4ACSR	6.82Y	113.7	0.03	12.34	18.08	13	123	0	100	0.04	0.0	11.706	0	0	0	0	0	0	0	0	0	0	1	44	L	
L	CO12093	CO12091	B	4ACSR	6.82Y	113.6	0.04	12.38	17.81	13	121	0	100	0.04	0.0	11.759	0	0	0	0	0	0	0	0	0	0	1	43	L	
L	CO12092	CO12093	B	4ACSR	6.81Y	113.6	0.03	12.42	14.12	10	96	0	100	0.03	0.0	11.816	0	0	0	0	0	0	0	0	0	0	3	42	L	
L	CO11991	CO12092	B	2ACSR	6.81Y	113.6	0.00	12.42	0.43	0	3	0	100	0.00	0.0	11.855	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO11953	CO12092	B	4ACSR	6.81Y	113.6	0.01	12.42	1.59	1	11	0	100	0.00	0.0	11.927	0	0	0	0	0	0	0	0	0	0	7	18	L	
L	CO11977	CO11953	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.001	0	0	0	0	0	0	0	0	0	0	2	2	L	
L	CO12121	CO11953	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	11.957	0	0	0	0	0	0	0	0	0	0	0	9	L	
L	CO12122	CO12121	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	11.977	0	0	0	0	0	0	0	0	0	0	0	9	L	
L	CO12072	CO12122	B	1/0ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.048	0	0	0	0	0	0	0	0	0	0	0	1	L	
L	CO12073	CO12072	B	1/0ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.110	0	0	0	0	0	0	0	0	0	0	0	1	1	L
L	CO11955	CO12122	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.069	0	0	0	0	0	0	0	0	0	0	0	8	L	
L	CO12112	CO11955	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.165	0	0	0	0	0	0	0	0	0	0	1	2	L	
L	CO12113	CO12112	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.189	0	0	0	0	0	0	0	0	0	0	0	1	1	L
L	CO11952	CO11955	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.150	0	0	0	0	0	0	0	0	0	0	0	6	L	
L	CO11978	CO11952	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.205	0	0	0	0	0	0	0	0	0	0	4	4	L	
L	CO-553770416	CO11952	B	2ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.174	0	0	0	0	0	0	0	0	0	0	0	2	L	
L	CO12119	CO-553770416	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.327	0	0	0	0	0	0	0	0	0	0	1	2	L	
L	CO12068	CO12119	B	4ACSR	6.81Y	113.6	0.00	12.42	0.00	0	0	0	100	0.00	0.0	12.474	0	0	0	0	0	0	0	0	0	0	0	1	1	L
L	CO11954	CO12092	B	4ACSR	6.81Y	113.6	0.01	12.43	7.49	5	51	0	100	0.01	0.0	11.852	0	0	0	0	0	0	0	0	0	0	12	21	L	
L	OH320763002	CO11954	B	4ACSR	6.81Y	113.6	0.00	12.43	6.12	4	42	0	100	0.00	0.0	11.871	0	0	0	0	0	0	0	0	0	0	0	9	L	
L	CO12070	OH320763002	B	4ACSR	6.81Y	113.6	0.01	12.44	6.12	4	42	0	100	0.00	0.0	11.893	0	0	0	0	0	0	0	0	0	0	1	9	L	
L	CO12030	CO12070	B	4ACSR	6.81Y	113.6	0.00	12.44	1.56	1	11	0	100	0.00	0.0	11.955	0	0	0	0	0	0	0	0	0	0	0	3	L	
L	CO-40813081	CO12030	B	2ACSR	6.81Y	113.6	0.00	12.44	0.00	0	0	0	100	0.00	0.0	11.990	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO12117	CO-40813081	B	4ACSR	6.81Y	113.6	0.00	12.44	0.00	0	0	0	100	0.00	0.0	12.056	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO12118	CO12117	B	4ACSR	6.81Y	113.6	0.00	12.44	0.00	0	0	0	100	0.00	0.0	12.110	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO-1589881533	CO12030	B	2ACSR	6.81Y	113.6	0.00	12.44	0.00	0	0	0	100	0.00	0.0	11.955	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO163686979	CO12030	B	4ACSR	6.81Y	113.6	0.00	12.44	1.56	1	11	0	100	0.00	0.0	11.991	0	0	0	0	0	0	0	0	0	0	0	0	3	L
L	CO-1060800752	CO163686979	B	2ACSR	6.81Y	113.6	0.00	12.44	0.00	0	0	0	100	0.00	0.0	12.030	0	0	0	0	0	0	0	0	0	0	0	1	1	L
L	CO-1690954910	CO163686979	B	4ACSR	6.81Y	113.6	0.00	12.45	1.56	1	11	0	100	0.00	0.0	12.003	0	0	0	0	0	0	0	0	0	0	0	2	2	L
L	CO-2017950116	CO12070	B	2ACSR	6.81Y	113.6	0.00	12.44	3.24	2	22	0	100	0.00	0.0	11.939	0	0	0	0	0	0	0	0	0	0	0	5	5	L
L	CO354670901	OH320763002	B	2ACSR	6.81Y	113.6	0.00	12.43	0.00	0	0	0	100	0.00	0.0	11.871	0	0	0	0	0	0	0	0	0	0	0	0	0	L
L	CO12116	CO12082	B	4ACSR	6.82Y	113.7	0.00	12.28	4.38	3	30	0	100	0.00	0.															

Balanced Voltage Drop Report
Source: SNOW HILL

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Table with columns: Element Name, Parent Name, Cnf, Type/Conductor, Pri kV, Base Volt, Element Drop, Units (Accum Drop, Thru Amps, Thru KW, Thru KVAR), % PF, % Loss, mi (From Src), Length (mi), Element (KW, KVAR), Cons On, Cons Thru. Includes multiple feeder descriptions like 'Feeder No. 0 (Doyle Pike) Beginning with Device OC405933875'.

Balanced Voltage Drop Report
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Summary

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		Units Displayed In Volts																			
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L C013613	C013614	A	4ACSR	6.24Y	104.0	0.25	21.97	51.07	36	303	102	95	0.66	0.2	17.604	0	0	0	1	52	L
L C013544	C013613	A	4ACSR	6.24Y	103.9	0.11	22.08	50.32	36	298	100	95	0.29	0.1	17.650	0	0	0	0	49	L
L C013616	C013544	A	4ACSR	6.23Y	103.9	0.06	22.14	50.32	36	297	100	95	0.16	0.1	17.675	0	0	0	0	49	L
L C013617	C013616	A	4ACSR	6.23Y	103.8	0.10	22.23	49.26	35	291	98	95	0.25	0.1	17.716	0	0	0	0	48	L
L C013618	C013617	A	4ACSR	6.21Y	103.5	0.24	22.47	49.26	35	291	98	95	0.62	0.2	17.819	0	0	0	0	48	L
L C013543	C013618	A	4ACSR	6.21Y	103.5	0.01	22.48	1.64	1	10	3	96	0.00	0.0	17.961	0	0	0	2	5	L
L C013571	C013543	A	4ACSR	6.21Y	103.5	0.00	22.48	0.00	0	0	0	100	0.00	0.0	18.197	0	0	0	1	1	L
L C013590	C013543	A	4ACSR	6.21Y	103.5	0.01	22.49	1.49	1	9	3	95	0.00	0.0	18.046	0	0	0	2	2	L
L C013686	C013618	A	4ACSR	6.20Y	103.4	0.15	22.62	47.62	34	280	94	95	0.38	0.1	17.886	0	0	0	2	43	L
L C013687	C013686	A	4ACSR	6.18Y	103.0	0.34	22.96	44.82	32	264	88	95	0.80	0.3	18.046	0	0	0	1	41	L
L C017098	C013687	A	4ACSR	6.16Y	102.7	0.30	23.25	42.43	30	249	83	95	0.66	0.3	18.194	0	0	0	0	40	L
L C013771	C017098	A	4ACSR	6.16Y	102.7	0.03	23.29	40.33	29	236	79	95	0.07	0.0	18.212	0	0	0	1	39	L
L C013772	C013771	A	4ACSR	6.15Y	102.5	0.18	23.47	38.66	28	226	76	95	0.37	0.2	18.311	0	0	0	2	38	L
L C013773	C013772	A	4ACSR	6.15Y	102.5	0.06	23.52	35.91	26	210	70	95	0.11	0.1	18.346	0	0	0	1	36	L
L C013774	C013773	A	4ACSR	6.14Y	102.3	0.21	23.73	32.72	23	191	64	95	0.36	0.2	18.481	0	0	0	1	35	L
L C013775	C013774	A	4ACSR	6.12Y	102.0	0.25	23.99	31.85	23	185	62	95	0.43	0.2	18.652	0	0	0	3	33	L
L C013776	C013775	A	4ACSR	6.12Y	102.0	0.05	24.03	27.10	19	157	53	95	0.07	0.0	18.690	0	0	0	0	30	L
L C013747	C013776	A	4ACSR	6.12Y	102.0	0.00	24.03	0.00	0	0	0	100	0.00	0.0	18.765	0	0	0	0	1	L
L C013746	C013747	A	4ACSR	6.12Y	102.0	0.00	24.03	0.00	0	0	0	100	0.00	0.0	18.898	0	0	0	1	1	L
L C013733	C013733	A	4ACSR	6.11Y	101.8	0.17	24.20	27.10	19	157	52	95	0.24	0.2	18.822	0	0	0	0	27	L
L C013777	C013733	A	4ACSR	6.10Y	101.7	0.10	24.30	23.22	17	135	45	95	0.12	0.1	18.911	0	0	0	1	26	L
L C013778	C013777	A	4ACSR	6.10Y	101.6	0.12	24.42	20.27	14	117	39	95	0.12	0.1	19.033	0	0	0	1	25	L
L C013779	C013778	A	4ACSR	6.09Y	101.5	0.08	24.50	19.43	14	112	37	95	0.09	0.1	19.125	0	0	0	0	24	L
L C013720	C013779	A	4ACSR	6.09Y	101.5	0.01	24.51	0.75	1	4	1	97	0.00	0.0	19.352	0	0	0	2	2	L
L C013734	C013779	A	4ACSR	6.09Y	101.5	0.03	24.53	2.84	2	16	5	95	0.01	0.0	19.381	0	0	0	1	3	L
L C013780	C013734	A	4ACSR	6.09Y	101.5	0.00	24.54	1.11	1	6	2	95	0.00	0.0	19.436	0	0	0	1	2	L
L C013781	C013780	A	4ACSR	6.09Y	101.5	0.01	24.54	1.07	1	6	2	95	0.00	0.0	19.570	0	0	0	1	1	L
L C013713	C013779	A	4ACSR	6.08Y	101.3	0.17	24.67	15.85	11	92	31	95	0.14	0.2	19.352	0	0	0	0	19	L
L C013735	C013713	A	4ACSR	6.08Y	101.3	0.02	24.69	14.26	10	82	27	95	0.01	0.0	19.377	0	0	0	1	18	L
L C013782	C013735	A	4ACSR	6.08Y	101.3	0.06	24.74	12.64	9	73	24	95	0.04	0.1	19.472	0	0	0	1	15	L
L C013783	C013782	A	4ACSR	6.07Y	101.2	0.08	24.82	11.96	9	69	23	95	0.05	0.1	19.617	0	0	0	0	14	L
L C013736	C013783	A	4ACSR	6.06Y	101.1	0.11	24.93	11.96	9	69	23	95	0.07	0.1	19.807	0	0	0	1	13	L
L C013784	C013736	A	4ACSR	6.06Y	101.0	0.12	25.05	11.96	9	69	23	95	0.07	0.1	20.016	0	0	0	2	12	L
L C013785	C013784	A	4ACSR	6.05Y	100.8	0.12	25.16	9.22	7	53	18	95	0.06	0.1	20.287	0	0	0	2	10	L
L C013786	C013785	A	4ACSR	6.05Y	100.8	0.03	25.20	7.82	6	45	15	95	0.01	0.0	20.375	0	0	0	0	8	L
L C013787	C013786	A	4ACSR	6.05Y	100.8	0.01	25.21	6.60	5	38	13	95	0.00	0.0	20.414	0	0	0	1	6	L
L C013788	C013787	A	4ACSR	6.05Y	100.8	0.01	25.22	3.19	2	18	6	95	0.00	0.0	20.489	0	0	0	1	5	L
L C013739	C013788	A	4ACSR	6.05Y	100.8	0.01	25.23	1.88	1	11	4	94	0.00	0.0	20.578	0	0	0	0	4	L
L C013738	C013739	A	4ACSR	6.05Y	100.8	0.01	25.24	1.88	1	11	4	94	0.00	0.0	20.735	0	0	0	0	3	L
L C013755	C013738	A	4ACSR	6.05Y	100.8	0.00	25.24	0.21	0	1	0	100	0.00	0.0	20.855	0	0	0	0	2	L
L C013754	C013755	A	4ACSR	6.05Y	100.8	0.00	25.24	0.21	0	1	0	100	0.00	0.0	20.874	0	0	0	2	2	L
L C013737	C013738	A	4ACSR	6.05Y	100.8	0.01	25.25	1.67	1	10	3	96	0.00	0.0	20.811	0	0	0	1	1	L
L C013728	C013739	A	2ACSR	6.05Y	100.8	0.00	25.23	0.00	0	0	0	100	0.00	0.0	20.621	0	0	0	1	1	L
L C013749	C013786	A	4ACSR	6.05Y	100.8	0.00	25.20	1.23	1	7	2	96	0.00	0.0	20.441	0	0	0	1	2	L
L C013748	C013749	A	4ACSR	6.05Y	100.8	0.00	25.20	0.04	0	0	0	100	0.00	0.0	20.520	0	0	0	1	1	L
L C013721	C013783	A	4ACSR	6.07Y	101.2	0.00	24.82	0.00	0	0	0	100	0.00	0.0	19.807	0	0	0	1	1	L
L C013727	C013735	A	2ACSR	6.08Y	101.3	0.01	24.69	1.15	1	7	2	96	0.00	0.0	19.524	0	0	0	1	2	L
L C01841925335	C013727	A	2ACSR	6.08Y	101.3	0.00	24.69	0.00	0	0	0	100	0.00	0.0	19.556	0	0	0	0	0	L
L C01666341963	C013727	A	2ACSR	6.08Y	101.3	0.00	24.69	0.20	0	1	0	100	0.00	0.0	19.560	0	0	0	1	1	L
L C013722	C013713	A	4ACSR	6.08Y	101.3	0.00	24.67	1.59	1	9	3	95	0.00	0.0	19.409	0	0	0	1	1	L
L C0-319479761	C013733	A	2ACSR	6.11Y	101.8	0.01	24.21	3.88	2	23	7	96	0.00	0.0	18.876	0	0	0	1	1	L
L C013719	C013776	A	4ACSR	6.12Y	102.0	0.00	24.03	0.00	0	0	0	100	0.00	0.0	18.974	0	0	0	2	2	L
L C013745	C013774	A	4ACSR	6.14Y	102.3	0.00	23.73	0.88	1	5	2	93	0.00	0.0	18.494	0	0	0	0	1	L
L C013744	C013745	A	4ACSR	6.14Y	102.3	0.00	23.73	0.88	1	5	2	93	0.00	0.0	18.532	0	0	0	1	1	L
L OH310545001	C013774	A	4ACSR	6.14Y	102.3	0.00	23.73	0.00	0	0	0	100	0.00	0.0	18.534	0	0	0	0	0	L
L C013726	C017098	A	2ACSR	6.16Y	102.7	0.00	23.26	2.09	1	12	4	95	0.00	0.0	18.236	0	0	0	1	1	L
L C017307	C013616	A	700 MCM Hd	6.23Y	103.9	0.00	22.14	1.07	0	6	2	95	0.00	0.0	17.690	0	0	0	1	1	L
L C013706	C013613	A	4ACSR	6.24Y	104.0	0.00	21.97	0.00	0	0	0	100	0.00	0.0	17.629	0	0	0	0	2	L
L C013705	C013706	A	4ACSR	6.24Y	104.0	0.00	21.97	0.00	0	0	0	100	0.00	0.0	17.634	0	0	0	0	2	L
L C013638	C013705	A	4ACSR	6.24Y	104.0	0.00	21.97	0.00	0	0	0	100	0.00	0.0	17.937	0	0	0	2	2	L
L C013639	C013705	A	4ACSR	6.24Y	104.0	0.00	21.97	0.00	0	0	0	100	0.00	0.0	17.710	0	0	0	0	0	L
L C013799	C013816	A	4ACSR	6.52Y	108.6	0.01	17.35	1.32	1	8	3	94	0.00	0.0	15.992	0	0	0	2	2	L
L C017157	C013789	A	4ACSR	6.54Y	109.1	0.00	16.92	0.00	0	0	0	100	0.00	0.0	15.860	0	0	0	0	1	L
L C014011	C017157	A	4ACSR	6.54Y	109.1	0.00	16.92	0.00	0	0	0	100	0.00	0.0	16.012	0	0	0	0	1	L
L C017099	C014011	A	2ACSR	6.54Y	109.1	0.00	16.92	0.00	0	0	0	100	0.00	0.0	16.079	0	0	0	0	1	L
L C013753	C017099	A	2ACSR	6.54Y	109.1	0.00	16.92	0.00	0	0	0	100	0.00	0.0							

Balanced Voltage Drop Report
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Summary

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		Units Displayed In Volts																				
		-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru		
L	CO13840	CO13839	A	4ACSR	6.75Y	112.6	0.00	13.43	0.06	0	0	0	100	0.00	0.0	15.960	0	0	0	2	L	
L	CO13841	CO13840	A	4ACSR	6.75Y	112.6	0.00	13.44	0.06	0	0	0	100	0.00	0.0	15.997	0	0	0	2	L	
L	CO13842	CO13841	A	4ACSR	6.75Y	112.6	0.00	13.44	0.06	0	0	0	100	0.00	0.0	16.206	0	0	0	2	L	
L	CO13843	CO13842	A	4ACSR	6.75Y	112.6	0.00	13.44	0.06	0	0	0	100	0.00	0.0	16.253	0	0	0	2	L	
L	CO13792	CO17154	A	4ACSR	6.75Y	112.6	0.00	13.43	0.00	0	0	0	100	0.00	0.0	15.496	0	0	0	1	L	
L	CO13793	CO13792	A	4ACSR	6.75Y	112.6	0.00	13.43	0.00	0	0	0	100	0.00	0.0	16.221	0	0	0	1	L	
L	CO17158	CO13792	A	4ACSR	6.75Y	112.6	0.00	13.43	0.00	0	0	0	100	0.00	0.0	15.562	0	0	0	0	L	
L	CO14049	CO14103	A	2ACSR	6.85Y	114.2	0.00	11.81	1.45	1	9	3	95	0.00	0.0	14.270	0	0	0	1	L	
L	CO14050	CO14049	A	2ACSR	6.85Y	114.2	0.00	11.81	1.45	1	9	3	95	0.00	0.0	14.337	0	0	0	1	L	
L	CO14130	AU25	C	4ACSR	6.92Y	115.4	0.02	10.64	73.80	53	483	165	95	0.09	0.0	13.893	0	0	0	0	85	L
L	OC405	CO14130	C	70 L OCR	6.92Y	115.4	0.00	10.64	73.80	105	483	165	95	0.00	0.0	13.893	0	0	0	0	85	L
L	CO14131	OC405	C	4ACSR	6.91Y	115.1	0.21	10.86	73.80	53	483	165	95	0.83	0.2	13.954	0	0	0	1	85	L
L	CO14089	CO14131	C	4ACSR	6.90Y	115.1	0.09	10.95	73.77	53	482	165	95	0.36	0.1	13.981	0	0	0	0	84	L
L	CO14006	CO14089	C	4ACSR	6.86Y	114.3	0.72	11.67	73.77	53	482	164	95	2.81	0.6	14.189	0	0	0	0	84	L
L	CO13948	CO14006	C	4ACSR	6.86Y	114.3	0.00	11.67	0.99	1	6	2	95	0.00	0.0	14.255	0	0	0	2	2	L
L	CO13949	CO14006	C	4ACSR	6.86Y	114.3	0.00	11.67	0.88	1	6	2	95	0.00	0.0	14.246	0	0	0	1	1	L
L	CO14102	CO14006	C	4ACSR	6.86Y	114.3	0.06	11.73	71.90	51	467	159	95	0.24	0.1	14.208	0	0	0	0	81	L
L	CO14078	CO14102	C	4ACSR	6.85Y	114.2	0.07	11.80	71.90	51	467	159	95	0.26	0.1	14.228	0	0	0	1	81	L
L	CO14079	CO14078	C	4ACSR	6.85Y	114.1	0.09	11.89	71.38	51	463	157	95	0.33	0.1	14.254	0	0	0	1	80	L
L	CO14111	CO14079	C	4ACSR	6.84Y	113.9	0.18	12.07	70.02	50	454	154	95	0.67	0.1	14.309	0	0	0	0	79	L
L	CO14112	CO14111	C	4ACSR	6.80Y	113.4	0.52	12.59	68.14	49	441	150	95	1.89	0.4	14.473	0	0	0	1	78	L
L	CO14007	CO14112	C	4ACSR	6.79Y	113.2	0.24	12.84	68.14	49	439	149	95	0.87	0.2	14.549	0	0	0	0	77	L
L	CO13950	CO14007	C	4ACSR	6.79Y	113.1	0.01	12.85	3.96	3	26	8	96	0.00	0.0	14.625	0	0	0	3	3	L
L	CO13902	CO14007	C	4ACSR	6.76Y	112.7	0.51	13.35	64.18	46	413	140	95	1.74	0.4	14.719	0	0	0	1	74	L
L	CO13951	CO13902	C	4ACSR	6.76Y	112.6	0.02	13.37	1.51	1	10	3	96	0.00	0.0	14.984	0	0	0	1	1	L
L	CO13915	CO13902	C	4ACSR	6.75Y	112.5	0.11	13.46	61.02	44	391	132	95	0.35	0.1	14.757	0	0	0	0	72	L
L	CO13903	CO13915	C	4ACSR	6.71Y	111.9	0.69	14.14	59.35	42	380	128	95	2.15	0.6	15.003	0	0	0	0	71	L
L	CO13904	CO13903	C	4ACSR	6.69Y	111.5	0.35	14.49	56.28	40	358	120	95	1.04	0.3	15.136	0	0	0	1	68	L
L	CO14105	CO13904	C	4ACSR	6.69Y	111.5	0.01	14.50	5.33	4	34	11	95	0.00	0.0	15.180	0	0	0	0	6	L
L	CO14098	CO14105	C	4ACSR	6.69Y	111.5	0.01	14.52	3.98	3	25	8	95	0.00	0.0	15.253	0	0	0	1	2	L
L	CO14099	CO14098	C	4ACSR	6.69Y	111.5	0.01	14.52	1.93	1	12	4	95	0.00	0.0	15.312	0	0	0	0	1	L
L	CO14024	CO14099	C	4ACSR	6.69Y	111.5	0.01	14.53	1.93	1	12	4	95	0.00	0.0	15.371	0	0	0	1	1	L
L	CO14106	CO14105	C	4ACSR	6.69Y	111.5	0.01	14.51	1.35	1	9	3	95	0.00	0.0	15.259	0	0	0	3	3	L
L	CO13952	CO14105	C	4ACSR	6.69Y	111.5	0.00	14.50	0.00	0	0	0	100	0.00	0.0	15.217	0	0	0	1	1	L
L	CO14060	CO13904	C	4ACSR	6.67Y	111.1	0.40	14.89	50.95	36	323	109	95	1.07	0.3	15.303	0	0	0	1	61	L
L	CO14061	CO14060	C	4ACSR	6.65Y	110.8	0.31	15.21	49.06	35	310	104	95	0.81	0.3	15.439	0	0	0	1	60	L
L	CO14025	CO14061	C	4ACSR	6.65Y	110.8	0.02	15.23	8.61	6	54	18	95	0.01	0.0	15.486	0	0	0	0	3	L
L	CO14026	CO14025	C	4ACSR	6.65Y	110.8	0.02	15.24	8.61	6	54	18	95	0.01	0.0	15.524	0	0	0	1	3	L
L	CO14062	CO14026	C	4ACSR	6.64Y	110.7	0.01	15.25	4.39	3	28	9	95	0.00	0.0	15.571	0	0	0	2	2	L
L	CO14134	CO14061	C	4ACSR	6.65Y	110.8	0.01	15.22	40.45	29	255	85	95	0.03	0.0	15.445	0	0	0	0	56	L
L	OC397	CO14134	C	25 H OCR	6.65Y	110.8	0.00	15.22	40.45	162	255	85	95	0.00	0.0	15.445	0	0	0	0	56	L
L	CO14135	OC397	C	4ACSR	6.64Y	110.6	0.18	15.40	37.93	27	239	80	95	0.36	0.2	15.548	0	0	0	2	46	L
L	CO14100	CO14135	C	4ACSR	6.63Y	110.5	0.11	15.51	37.93	27	239	80	95	0.22	0.1	15.609	0	0	0	1	44	L
L	CO14132	CO14100	C	2ACSR	6.63Y	110.5	0.00	15.51	0.00	0	0	0	100	0.00	0.0	15.694	0	0	0	0	1	L
L	CO14133	CO14132	C	2ACSR	6.63Y	110.5	0.00	15.51	0.00	0	0	0	100	0.00	0.0	15.761	0	0	0	1	1	L
L	CO13953	CO14100	C	4ACSR	6.63Y	110.5	0.00	15.51	1.25	1	8	3	94	0.00	0.0	15.676	0	0	0	1	1	L
L	CO17152	CO14100	C	4ACSR	6.62Y	110.3	0.20	15.71	36.68	26	231	77	95	0.38	0.2	15.723	0	0	0	2	41	L
L	CO13723	CO17152	C	4ACSR	6.62Y	110.3	0.00	15.71	0.00	0	0	0	100	0.00	0.0	16.054	0	0	0	2	2	L
L	CO13756	CO17152	C	4ACSR	6.61Y	110.2	0.07	15.78	36.32	26	228	76	95	0.13	0.1	15.764	0	0	0	1	37	L
L	CO13757	CO13756	C	4ACSR	6.60Y	110.0	0.24	16.02	34.59	25	217	73	95	0.44	0.2	15.912	0	0	0	3	36	L
L	CO13724	CO13757	C	4ACSR	6.60Y	110.0	0.00	16.02	1.50	1	9	3	95	0.00	0.0	15.950	0	0	0	1	1	L
L	CO13741	CO13757	C	4ACSR	6.59Y	109.8	0.21	16.23	31.52	23	197	66	95	0.35	0.2	16.054	0	0	0	2	32	L
L	CO13740	CO13741	C	4ACSR	6.58Y	109.7	0.09	16.31	29.89	21	187	62	95	0.14	0.1	16.116	0	0	0	0	30	L
L	CO13714	CO13740	C	4ACSR	6.57Y	109.5	0.16	16.47	27.15	19	169	57	95	0.23	0.1	16.239	0	0	0	0	28	L
L	CO13751	CO13714	C	4ACSR	6.57Y	109.5	0.02	16.48	3.54	3	22	7	95	0.00	0.0	16.334	0	0	0	2	3	L
L	CO13750	CO13751	C	4ACSR	6.57Y	109.5	0.01	16.49	1.57	1	10	3	96	0.00	0.0	16.409	0	0	0	1	1	L
L	CO13758	CO13714	C	4ACSR	6.56Y	109.4	0.15	16.62	23.61	17	147	49	95	0.19	0.1	16.375	0	0	0	1	25	L
L	CO13759	CO13758	C	4ACSR	6.55Y	109.2	0.14	16.76	23.61	17	147	49	95	0.18	0.1	16.504	0	0	0	0	24	L
L	CO13712	CO13759	C	4ACSR	6.55Y	109.2	0.07	16.84	23.61	17	147	49	95	0.09	0.1	16.570	0	0	0	0	24	L
L	CO13711	CO13712	C	4ACSR	6.55Y	109.1	0.02	16.86	3.65	3	23	8	94	0.00	0.0	16.684	0	0	0	0	4	L
L	CO13715	CO13711	C	4ACSR	6.55Y	109.1	0.00	16.86	0.55	0	3	1	95	0.00	0.0	16.779	0	0	0	1	1	L
L	CO13732	CO13711	C	4ACSR	6.55Y	109.1	0.01	16.87	3.11	2	19	6	95	0.00	0.0	16.760	0	0	0	1	3	L
L	CO13731	CO13732	C	4ACSR	6.55Y	109.1	0.04	16.91	2.57	2	16	5	95	0.01	0.0	17.101	0	0	0	1	2	L
L	CO13730	CO13731	C	4ACSR	6.55Y	109.1	0.00	16.91	0.00	0	0	0	100	0.00	0.0	17.321	0	0	0	0	1	L
L	CO13717	CO13730	C	4ACSR																		

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	KVAR	Cons On	Cons Thru	
L C013769	C013768	C	4ACSR	6.52Y	108.7	0.03	17.32	9.15	7	57	19	95	0.01	0.0	17.262	0	0	0	1	6	L
L C013770	C013769	C	4ACSR	6.52Y	108.7	0.02	17.33	7.28	5	45	15	95	0.01	0.0	17.318	0	0	0	1	5	L
L CO-26786578	C013770	C	4ACSR	6.52Y	108.7	0.01	17.34	7.03	5	44	14	95	0.00	0.0	17.337	0	0	0	0	4	L
L CO-575413345	CO-26786578	C	4ACSR	6.52Y	108.7	0.01	17.35	1.83	1	11	4	94	0.00	0.0	17.414	0	0	0	1	1	L
L CO860588340	CO-26786578	C	4ACSR	6.52Y	108.6	0.02	17.36	5.20	4	32	11	95	0.01	0.0	17.413	0	0	0	0	3	L
L C014008	CO860588340	C	4ACSR	6.52Y	108.6	0.01	17.37	5.20	4	32	11	95	0.00	0.0	17.470	0	0	0	1	3	L
L C014009	C014008	C	4ACSR	6.52Y	108.6	0.01	17.38	2.43	2	15	5	95	0.00	0.0	17.536	0	0	0	0	2	L
L C014010	C014009	C	4ACSR	6.52Y	108.6	0.01	17.39	2.43	2	15	5	95	0.00	0.0	17.583	0	0	0	1	2	L
L C01661661154	C014010	C	2ACSR	6.52Y	108.6	0.00	17.39	0.00	0	0	0	100	0.00	0.0	17.657	0	0	0	0	1	L
L CO-2142403068	C01661661154	C	2ACSR	6.52Y	108.6	0.00	17.39	0.00	0	0	0	100	0.00	0.0	17.722	0	0	0	0	1	L
L CO-761002848	CO-2142403068	C	2ACSR	6.52Y	108.6	0.00	17.39	0.00	0	0	0	100	0.00	0.0	17.787	0	0	0	1	1	L
L C017097	C013770	C	4ACSR	6.52Y	108.7	0.00	17.33	0.00	0	0	0	100	0.00	0.0	17.583	0	0	0	0	0	L
L C013993	C017097	C	4ACSR	6.52Y	108.7	0.00	17.33	0.00	0	0	0	100	0.00	0.0	17.782	0	0	0	0	0	L
L C01725692363	CO420891903	C	2ACSR	6.52Y	108.7	0.01	17.28	1.92	1	12	4	95	0.00	0.0	17.294	0	0	0	1	1	L
L C013743	C013761	C	4ACSR	6.53Y	108.9	0.01	17.13	2.23	2	14	5	94	0.00	0.0	16.996	0	0	0	1	2	L
L C013742	C013743	C	4ACSR	6.53Y	108.9	0.00	17.13	1.59	1	10	3	96	0.00	0.0	17.028	0	0	0	1	1	L
L C013725	C013740	C	4ACSR	6.58Y	109.7	0.01	16.32	2.74	2	17	6	94	0.00	0.0	16.201	0	0	0	1	2	L
L CO-299659069	C013725	C	2ACSR	6.58Y	109.7	0.00	16.32	0.00	0	0	0	100	0.00	0.0	16.265	0	0	0	1	1	L
L C014136	OC397	C	4ACSR	6.65Y	110.8	0.01	15.23	2.53	2	16	5	95	0.00	0.0	15.541	0	0	0	1	10	L
L C014096	C014136	C	4ACSR	6.65Y	110.8	0.01	15.24	1.27	1	8	3	94	0.00	0.0	15.657	0	0	0	2	9	L
L C014097	C014096	C	4ACSR	6.65Y	110.8	0.00	15.24	0.75	1	5	2	93	0.00	0.0	15.674	0	0	0	0	7	L
L C014094	C014097	C	4ACSR	6.65Y	110.8	0.00	15.24	0.75	1	5	2	93	0.00	0.0	15.806	0	0	0	1	7	L
L C014095	C014094	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	15.863	0	0	0	0	6	L
L C014031	C014095	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	15.996	0	0	0	0	6	L
L C014032	C014031	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.128	0	0	0	0	6	L
L C014033	C014032	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.280	0	0	0	0	4	L
L C014034	C014033	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.355	0	0	0	0	4	L
L C014076	C014034	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.420	0	0	0	1	4	L
L C014077	C014076	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.431	0	0	0	0	3	L
L C014035	C014077	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.447	0	0	0	0	3	L
L C013962	C014035	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.480	0	0	0	2	2	L
L C013963	C014035	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.516	0	0	0	1	1	L
L C013935	C014032	C	4ACSR	6.65Y	110.8	0.00	15.24	0.00	0	0	0	100	0.00	0.0	16.213	0	0	0	2	2	L
L C014021	C013903	C	4ACSR	6.71Y	111.8	0.01	14.15	3.07	2	20	6	96	0.00	0.0	15.060	0	0	0	2	3	L
L C014022	C014021	C	4ACSR	6.71Y	111.8	0.01	14.16	2.00	1	13	4	96	0.00	0.0	15.126	0	0	0	0	1	L
L C014023	C014022	C	4ACSR	6.71Y	111.8	0.01	14.17	2.00	1	13	4	96	0.00	0.0	15.249	0	0	0	1	1	L
L C013954	C013915	C	4ACSR	6.75Y	112.5	0.01	13.46	1.66	1	11	4	94	0.00	0.0	14.833	0	0	0	1	1	L
L C013965	C014111	C	2ACSR	6.84Y	113.9	0.00	12.07	1.88	1	12	4	95	0.00	0.0	14.372	0	0	0	1	1	L
L OH360439001	ST360439001	C	4ACSR	7.02Y	116.9	0.08	9.06	59.51	43	394	138	94	0.25	0.1	11.505	0	0	0	0	56	L
L C011614	OH360439001	C	4ACSR	6.99Y	116.5	0.47	9.53	59.01	42	391	137	94	1.47	0.4	11.676	0	0	0	3	56	L
L C011615	C011614	C	4ACSR	6.97Y	116.2	0.23	9.76	54.11	39	357	125	94	0.65	0.2	11.766	0	0	0	1	49	L
L C011616	C011615	C	4ACSR	6.96Y	116.0	0.22	9.99	52.67	38	347	121	94	0.62	0.2	11.857	0	0	0	0	48	L
L C011617	C011616	C	4ACSR	6.95Y	115.8	0.18	10.17	52.67	38	346	121	94	0.51	0.1	11.931	0	0	0	3	48	L
L C011626	C011617	C	4ACSR	6.95Y	115.8	0.05	10.22	13.90	10	92	30	95	0.04	0.0	12.007	0	0	0	2	9	L
L C011627	C011626	C	4ACSR	6.95Y	115.8	0.01	10.23	10.45	7	69	23	95	0.01	0.0	12.035	0	0	0	1	7	L
L C011655	C011627	C	4ACSR	6.94Y	115.7	0.02	10.26	7.14	5	47	16	95	0.01	0.0	12.106	0	0	0	2	5	L
L C011656	C011655	C	4ACSR	6.94Y	115.7	0.01	10.27	4.78	3	31	10	95	0.00	0.0	12.149	0	0	0	1	3	L
L C011585	C011656	C	4ACSR	6.94Y	115.7	0.01	10.28	2.56	2	17	6	94	0.00	0.0	12.243	0	0	0	1	1	L
L C011586	C011656	C	4ACSR	6.94Y	115.7	0.00	10.27	0.00	0	0	0	100	0.00	0.0	12.225	0	0	0	1	1	L
L CO441267905	C011627	C	2ACSR	6.95Y	115.8	0.00	10.23	0.00	0	0	0	100	0.00	0.0	12.114	0	0	0	1	1	L
L C011562	C011617	C	4ACSR	6.93Y	115.6	0.27	10.44	37.63	27	246	88	94	0.53	0.2	12.083	0	0	0	3	36	L
L C011563	C011562	C	4ACSR	6.93Y	115.4	0.12	10.56	33.28	24	217	78	94	0.21	0.1	12.158	0	0	0	0	27	L
L C011618	C011563	C	4ACSR	6.91Y	115.1	0.30	10.86	29.28	21	191	69	94	0.46	0.2	12.376	0	0	0	0	22	L
L C011619	C011618	C	4ACSR	6.91Y	115.1	0.05	10.90	29.28	21	190	69	94	0.07	0.0	12.409	0	0	0	0	22	L
L C011620	C011619	C	4ACSR	6.91Y	115.1	0.01	10.91	29.28	21	190	69	94	0.02	0.0	12.417	0	0	0	1	22	L
L C011582	C011620	C	4ACSR	6.90Y	115.1	0.02	10.94	3.28	2	22	7	95	0.00	0.0	12.569	0	0	0	4	4	L
L C011653	C011620	C	4ACSR	6.90Y	115.0	0.13	11.04	24.33	17	158	58	94	0.16	0.1	12.527	0	0	0	2	17	L
L CO780471879	C011653	C	2ACSR	6.90Y	114.9	0.01	11.05	22.13	12	143	53	94	0.01	0.0	12.544	0	0	0	0	15	L
L CO-1129549170	CO780471879	C	2ACSR	6.90Y	114.9	0.02	11.07	21.23	12	137	51	94	0.02	0.0	12.573	0	0	0	0	14	L
L C011666	CO-1129549170	C	4ACSR	6.89Y	114.8	0.08	11.15	19.71	14	127	48	94	0.08	0.1	12.655	0	0	0	2	13	L
L C011671	C011666	C	4ACSR	6.89Y	114.8	0.09	11.24	17.49	12	113	43	93	0.09	0.1	12.768	0	0	0	1	11	L
L C011672	C011671	C	4ACSR	6.88Y	114.7	0.02	11.27	15.18	11	97	38	93	0.02	0.0	12.800	0	0	0	0	10	L
L C011621	C011672	C	4ACSR	6.88Y	114.7	0.01	11.28	15.18	11	97	38	93	0.01	0.0	12.818	0	0	0	2	10	L
L C011580	C011621	C	4ACSR	6.88Y	114.7	0.00	11.28	0.74	1	5	2	93	0.00	0.0	12.884	0	0	0	1	1	L
L C011622	C011621	C	4ACSR	6.88Y	114.6	0.10	11.38	10.26	7	65	27	92	0.05	0.1	13.028	0	0	0	0	7	L
L C011623	C011622	C	4ACSR	6.87Y	114.6	0.04	11.42	10.26	7	65	27										

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		Units Displayed In Volts															-----Element-----				
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
L C011581	CO-1129549170	C	4ACSR	6.90Y	114.9	0.00	11.08	1.52	1	10	3	96	0.00	0.0	12.639	0	0	0	1	1	L
L CO-397037819	CO780471879	C	2ACSR	6.90Y	114.9	0.00	11.05	0.22	0	1	0	100	0.00	0.0	12.608	0	0	0	1	1	L
L C011657	CO11563	C	4ACSR	6.93Y	115.4	0.02	10.58	4.00	3	26	9	94	0.00	0.0	12.265	0	0	0	3	5	L
L C017205	CO11657	C	4ACSR	6.92Y	115.4	0.01	10.59	1.59	1	10	3	96	0.00	0.0	12.414	0	0	0	2	2	L
L C011583	CO11562	C	4ACSR	6.93Y	115.6	0.01	10.45	2.87	2	19	6	95	0.00	0.0	12.149	0	0	0	3	3	L
L C011584	CO11562	C	4ACSR	6.93Y	115.6	0.01	10.44	1.16	1	8	3	94	0.00	0.0	12.196	0	0	0	3	3	L
L C011658	CO11614	C	4ACSR	6.99Y	116.5	0.01	9.54	2.65	2	18	6	95	0.00	0.0	11.727	0	0	0	2	4	L
L C011659	CO11658	C	4ACSR	6.99Y	116.5	0.01	9.54	2.41	2	16	5	95	0.00	0.0	11.782	0	0	0	1	2	L
L C011641	CO11659	C	4ACSR	6.99Y	116.5	0.00	9.55	1.54	1	10	3	96	0.00	0.0	11.839	0	0	0	1	1	L
L C017161	CO1491683279	B	4ACSR	7.00Y	116.7	0.26	9.26	38.58	28	257	86	95	0.54	0.2	10.311	0	0	0	1	81	L
L C014471	CO17161	B	4ACSR	7.00Y	116.7	0.02	9.27	5.04	4	34	11	95	0.00	0.0	10.377	0	0	0	2	4	L
L C014472	CO14471	B	4ACSR	7.00Y	116.7	0.01	9.28	2.10	1	14	5	94	0.00	0.0	10.434	0	0	0	2	2	L
L C014325	CO17161	B	4ACSR	6.99Y	116.5	0.24	9.49	33.54	24	223	74	95	0.42	0.2	10.462	0	0	0	1	76	L
L C014347	CO14325	B	4ACSR	6.99Y	116.5	0.00	9.49	0.00	0	0	0	100	0.00	0.0	10.765	0	0	0	1	1	L
L C014324	CO14325	B	4ACSR	6.98Y	116.3	0.24	9.73	33.23	24	220	73	95	0.42	0.2	10.614	0	0	0	0	74	L
L C014348	CO14324	B	4ACSR	6.98Y	116.3	0.00	9.73	0.47	0	3	1	95	0.00	0.0	10.699	0	0	0	1	1	L
L C014469	CO14324	B	4ACSR	6.97Y	116.1	0.13	9.86	32.76	23	217	72	95	0.22	0.1	10.697	0	0	0	1	73	L
L C014470	CO14469	B	4ACSR	6.96Y	116.0	0.13	9.99	32.53	23	215	71	95	0.23	0.1	10.785	0	0	0	1	72	L
L C014468	CO14470	B	4ACSR	6.95Y	115.9	0.16	10.15	31.96	23	211	70	95	0.26	0.1	10.889	0	0	0	0	70	L
L C014523	CO14468	B	4ACSR	6.95Y	115.8	0.10	10.25	31.96	23	211	70	95	0.17	0.1	10.955	0	0	0	0	70	L
L C014466	CO14523	B	2ACSR	6.94Y	115.7	0.08	10.33	30.11	17	199	66	95	0.12	0.1	11.033	0	0	0	0	68	L
L C014467	CO14466	B	2ACSR	6.94Y	115.6	0.04	10.36	30.11	17	198	65	95	0.05	0.0	11.070	0	0	0	0	68	L
L C014465	CO14467	B	2ACSR	6.93Y	115.6	0.08	10.44	30.11	17	198	65	95	0.12	0.1	11.151	0	0	0	0	68	L
L C014464	CO14465	B	2ACSR	6.93Y	115.6	0.00	10.44	0.03	0	0	0	100	0.00	0.0	11.218	0	0	0	1	1	L
L CO-1564012935	CO14465	B	2ACSR	6.92Y	115.3	0.25	10.70	30.08	17	198	65	95	0.38	0.2	11.406	0	0	0	1	67	L
L CO-1564012935	CO-1564012935	B	2ACSR	6.92Y	115.3	0.02	10.72	29.80	17	196	64	95	0.03	0.0	11.428	0	0	0	0	65	L
L SW360219006	CO713604796	B	Closed	6.92Y	115.3	0.00	10.72	29.80	0	196	64	95	0.00	0.0	11.428	0	0	0	0	65	L
L SW360219006	SW360219006	B	Closed	6.92Y	115.3	0.00	10.72	29.80	0	196	64	95	0.00	0.0	11.428	0	0	0	0	65	L
L CO-790462855	SW360219007	B	2ACSR	6.91Y	115.2	0.05	10.77	29.80	17	196	64	95	0.07	0.0	11.477	0	0	0	0	65	L
L C011778	CO-790462855	B	4ACSR	6.91Y	115.2	0.01	10.78	2.21	2	14	5	94	0.00	0.0	11.562	0	0	0	1	1	L
L C011779	CO-790462855	B	4ACSR	6.91Y	115.1	0.10	10.87	27.60	20	181	59	95	0.14	0.1	11.553	0	0	0	0	64	L
L C011743	CO11779	B	6ACWC	6.90Y	114.9	0.22	11.08	27.60	20	181	59	95	0.32	0.2	11.723	0	0	0	1	64	L
L C011744	CO11743	B	6ACWC	6.89Y	114.9	0.05	11.13	27.60	20	181	59	95	0.07	0.0	11.761	0	0	0	0	63	L
L C011742	CO11744	B	6ACWC	6.88Y	114.6	0.24	11.37	27.60	20	181	59	95	0.35	0.2	11.951	0	0	0	0	63	L
L C011783	CO11742	B	4ACSR	6.88Y	114.6	0.02	11.39	3.12	2	20	7	94	0.00	0.0	12.064	0	0	0	2	5	L
L C011712	CO11783	B	4ACSR	6.88Y	114.6	0.01	11.40	1.53	1	10	3	96	0.00	0.0	12.187	0	0	0	2	2	L
L C011782	CO11783	B	4ACSR	6.88Y	114.6	0.00	11.39	0.00	0	0	0	100	0.00	0.0	12.140	0	0	0	1	1	L
L C011701	CO11742	B	6ACWC	6.87Y	114.5	0.16	11.54	24.47	17	160	52	95	0.21	0.1	12.093	0	0	0	0	58	L
L C011713	CO11701	B	4ACSR	6.87Y	114.5	0.00	11.54	0.04	0	0	0	100	0.00	0.0	12.235	0	0	0	1	1	L
L C011714	CO11701	B	4ACSR	6.87Y	114.5	0.00	11.54	0.03	0	0	0	100	0.00	0.0	12.159	0	0	0	2	2	L
L C011741	CO11701	B	6ACWC	6.86Y	114.4	0.05	11.58	24.41	17	159	52	95	0.06	0.0	12.137	0	0	0	1	55	L
L SW360209002	CO11741	B	Closed	6.86Y	114.4	0.00	11.58	24.41	0	159	52	95	0.00	0.0	12.137	0	0	0	0	54	L
L SW360209001	SW360209002	B	Closed	6.86Y	114.4	0.00	11.58	24.41	0	159	52	95	0.00	0.0	12.137	0	0	0	0	54	L
L OH360209003	SW360209001	B	6ACWC	6.86Y	114.3	0.07	11.65	24.41	17	159	52	95	0.09	0.1	12.199	0	0	0	0	54	L
L C011802	OH360209003	B	6ACWC	6.86Y	114.3	0.02	11.68	23.43	17	153	50	95	0.03	0.0	12.220	0	0	0	1	54	L
L C011801	CO11802	B	6ACWC	6.86Y	114.3	0.01	11.68	23.43	17	153	50	95	0.01	0.0	12.226	0	0	0	0	53	L
L C011799	CO11801	B	6ACWC	6.86Y	114.3	0.01	11.69	22.18	16	145	47	95	0.01	0.0	12.234	0	0	0	0	53	L
L OC327	CO11799	B	15 H OCR	6.86Y	114.3	0.00	11.69	22.18	148	145	47	95	0.00	0.0	12.234	0	0	0	0	53	L
L C011800	OC327	B	6ACWC	6.85Y	114.2	0.06	11.75	22.18	16	145	47	95	0.07	0.0	12.294	0	0	0	3	53	L
L C011777	CO11800	B	6ACWC	6.85Y	114.1	0.11	11.87	22.13	16	144	47	95	0.13	0.1	12.404	0	0	0	1	50	L
L C011776	CO11777	B	6ACWC	6.85Y	114.1	0.02	11.88	21.63	15	141	46	95	0.02	0.0	12.422	0	0	0	0	49	L
L C011775	CO11776	B	6ACWC	6.84Y	114.0	0.12	12.01	21.63	15	141	46	95	0.14	0.1	12.545	0	0	0	0	49	L
L C011746	CO11775	B	6ACWC	6.84Y	113.9	0.05	12.06	21.63	15	141	46	95	0.06	0.0	12.596	0	0	0	1	49	L
L OH360209001	CO11746	B	6ACWC	6.83Y	113.9	0.06	12.12	20.67	15	134	43	95	0.07	0.0	12.660	0	0	0	0	48	L
L C011745	OH360209001	B	6ACWC	6.83Y	113.8	0.08	12.20	17.98	13	117	38	95	0.08	0.1	12.761	0	0	0	2	46	L
L C011747	CO11745	B	6ACWC	6.83Y	113.8	0.03	12.23	16.67	12	108	35	95	0.02	0.0	12.797	0	0	0	1	41	L
L C017228	CO11747	B	6ACWC	6.82Y	113.6	0.15	12.39	16.58	12	108	35	95	0.13	0.1	12.997	0	0	0	0	40	L
L C014358	CO17228	B	4ACSR	6.82Y	113.6	0.00	12.39	0.01	0	0	0	100	0.00	0.0	13.054	0	0	0	2	2	L
L C017170	CO17228	B	6ACWC	6.81Y	113.5	0.10	12.48	15.62	11	101	33	95	0.08	0.1	13.131	0	0	0	2	36	L
L C016314	CO17170	B	6ACWC	6.81Y	113.4	0.09	12.57	15.54	11	101	33	95	0.07	0.1	13.253	0	0	0	1	34	L
L C016458	CO16314	B	6ACWC	6.80Y	113.4	0.07	12.64	15.54	11	101	33	95	0.06	0.1	13.354	0	0	0	3	33	L
L C016459	CO16458	B	6ACWC	6.80Y	113.3	0.01	12.65	14.54	10	94	30	95	0.01	0.0	13.370	0	0	0	0	30	L
L SW250772004	CO16459	B	Closed	6.80Y	113.3	0.00	12.65	5.51	0	36	12	95	0.00	0.0	13.370	0	0	0	0	10	L
L SW250772005	SW250772004	B	Closed	6.80Y	113.3	0.00	12.65	5.51	0	36	12	95	0.00	0.0	13.370	0	0	0	0	10	L
L CO42141389	SW250772005	B	2ACSR	6.80Y	113.3	0.02	12.67	5.51	3	36	12	95	0.01	0.0	13.472	0					

Balanced Voltage Drop Report
Source: SNOW HILL

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																								
-Base Voltage:120.0-																								
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru				
L CO16282	CO16453	B	6ACWC	6.80Y	113.3	0.00	12.72	0.68	0	4	1	97	0.00	0.0	13.935	0	0	0	1	1	L			
L SW250772002	CO16459	B	Closed	6.80Y	113.3	0.00	12.65	9.02	0	58	19	95	0.00	0.0	13.370	0	0	0	0	0	20	L		
L SW250772001	SW250772002	B	Closed	6.80Y	113.3	0.00	12.65	9.02	0	58	19	95	0.00	0.0	13.370	0	0	0	0	0	0	20	L	
L CO16315	SW250772001	B	6ACWC	6.80Y	113.3	0.04	12.69	9.02	6	58	19	95	0.02	0.0	13.466	0	0	0	0	0	0	20	L	
L CO16285	CO16315	B	6ACWC	6.80Y	113.3	0.00	12.69	0.00	0	0	0	100	0.00	0.0	13.521	0	0	0	0	1	1	L		
L CO-227915052	CO16315	B	2ACSR	6.80Y	113.3	0.00	12.69	0.00	0	0	0	100	0.00	0.0	13.781	0	0	0	0	0	0	0	L	
L CO16316	CO16315	B	6ACWC	6.79Y	113.2	0.09	12.78	9.02	6	58	19	95	0.04	0.1	13.677	0	0	0	0	0	0	19	L	
L CO-1391645582	CO16316	B	2ACSR	6.79Y	113.2	0.00	12.78	0.05	0	0	0	100	0.00	0.0	13.785	0	0	0	0	1	1	1	L	
L CO16317	CO16316	B	6ACWC	6.79Y	113.1	0.07	12.85	8.98	6	58	18	96	0.03	0.1	13.845	0	0	0	0	1	18	1	L	
L CO16318	CO16317	B	2ACSR	6.79Y	113.1	0.01	12.86	7.26	4	47	15	95	0.00	0.0	13.894	0	0	0	0	0	0	11	L	
L CO16271	CO16318	B	6ACWC	6.79Y	113.1	0.03	12.89	7.26	5	47	15	95	0.01	0.0	13.970	0	0	0	0	2	11	1	L	
L CO16288	CO16271	B	6ACWC	6.79Y	113.1	0.01	12.90	1.95	1	13	4	96	0.00	0.0	14.055	0	0	0	0	1	1	1	L	
L CO16268	CO16271	B	6ACWC	6.79Y	113.1	0.02	12.91	3.17	2	21	6	96	0.00	0.0	14.084	0	0	0	0	2	8	1	L	
L CO16269	CO16268	B	6ACWC	6.78Y	113.1	0.02	12.92	2.46	2	16	5	95	0.00	0.0	14.235	0	0	0	0	0	0	5	1	L
L CO16270	CO16269	B	6ACWC	6.78Y	113.1	0.00	12.93	2.46	2	16	5	95	0.00	0.0	14.273	0	0	0	0	0	0	5	1	L
L CO16286	CO16270	B	6ACWC	6.78Y	113.1	0.00	12.93	0.80	1	5	2	93	0.00	0.0	14.350	0	0	0	0	2	2	2	1	L
L CO16325	CO16270	B	6ACWC	6.78Y	113.1	0.00	12.93	0.73	1	5	2	93	0.00	0.0	14.386	0	0	0	0	0	0	2	1	L
L CO16326	CO16325	B	6ACWC	6.78Y	113.1	0.00	12.93	0.73	1	5	2	93	0.00	0.0	14.434	0	0	0	0	2	2	2	1	L
L CO16472	CO16270	B	1/0PRIURD	6.78Y	113.1	0.00	12.93	0.93	1	6	1	99	0.00	0.0	14.470	0	0	0	0	1	1	1	1	L
L CO16287	CO16268	B	6ACWC	6.79Y	113.1	0.00	12.91	0.03	0	0	0	100	0.00	0.0	14.159	0	0	0	0	1	1	1	1	L
L CO16289	CO16317	B	2ACSR	6.79Y	113.1	0.00	12.85	0.52	0	3	1	95	0.00	0.0	13.864	0	0	0	0	2	2	2	1	L
L CO2101283083	CO16317	B	2ACSR	6.79Y	113.1	0.00	12.86	1.19	1	8	3	94	0.00	0.0	13.929	0	0	0	0	0	0	4	1	L
L CO16319	CO2101283083	B	6ACWC	6.79Y	113.1	0.02	12.87	1.19	1	8	3	94	0.00	0.0	14.213	0	0	0	0	0	0	4	1	L
L CO16320	CO16319	B	6ACWC	6.79Y	113.1	0.01	12.88	1.19	1	8	3	94	0.00	0.0	14.374	0	0	0	0	1	2	2	1	L
L CO16321	CO16320	B	6ACWC	6.79Y	113.1	0.00	12.88	0.41	0	3	1	95	0.00	0.0	14.488	0	0	0	0	0	0	1	1	L
L CO16322	CO16321	B	6ACWC	6.79Y	113.1	0.00	12.88	0.41	0	3	1	95	0.00	0.0	14.564	0	0	0	0	0	0	1	1	L
L CO16323	CO16319	B	6ACWC	6.79Y	113.1	0.00	12.87	0.00	0	0	0	100	0.00	0.0	14.429	0	0	0	0	1	2	2	1	L
L CO16324	CO16323	B	6ACWC	6.79Y	113.1	0.00	12.87	0.00	0	0	0	100	0.00	0.0	14.459	0	0	0	0	1	1	1	1	L
L CO17171	CO17228	B	4ACSR	6.82Y	113.6	0.00	12.39	0.95	1	6	2	95	0.00	0.0	13.054	0	0	0	0	0	0	2	1	L
L CO16313	CO17171	B	4ACSR	6.82Y	113.6	0.01	12.40	0.95	1	6	2	95	0.00	0.0	13.196	0	0	0	0	1	2	2	1	L
L CO-327034808	CO16313	B	2ACSR	6.82Y	113.6	0.00	12.40	0.00	0	0	0	100	0.00	0.0	13.250	0	0	0	0	1	1	1	1	L
L CO17215	CO11745	B	6ACWC	6.83Y	113.8	0.01	12.21	0.46	0	3	1	95	0.00	0.0	13.026	0	0	0	0	0	0	3	1	L
L CO14673	CO17215	B	6ACWC	6.83Y	113.8	0.00	12.21	0.00	0	0	0	100	0.00	0.0	13.064	0	0	0	0	0	0	0	0	L
L CO11784	CO17215	B	4ACSR	6.83Y	113.8	0.00	12.21	0.46	0	3	1	95	0.00	0.0	13.181	0	0	0	0	1	3	3	1	L
L OH360209002	CO11784	B	4ACSR	6.83Y	113.8	0.00	12.21	0.12	0	1	0	100	0.00	0.0	13.228	0	0	0	0	0	0	2	1	L
L CO11730	OH360209002	B	4ACSR	6.83Y	113.8	0.00	12.21	0.12	0	1	0	100	0.00	0.0	13.260	0	0	0	0	2	2	2	1	L
L CO-674041306	OH360209001	B	1/0PRIURD	6.83Y	113.9	0.00	12.12	2.67	2	18	5	96	0.00	0.0	12.717	0	0	0	0	2	2	2	1	L
L UD360209001	CO-674041306	B	1/0PRIURD	6.83Y	113.9	0.00	12.13	2.56	2	17	5	96	0.00	0.0	12.796	0	0	0	0	0	0	0	0	L
L CO-1666065060	CO11801	B	2ACSR	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	12.270	0	0	0	0	0	0	0	0	L
L CO555388953	CO-1666065060	B	2ACSR	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	12.298	0	0	0	0	0	0	0	0	L
L CO1975085678	CO555388953	B	2ACSR	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	12.457	0	0	0	0	0	0	0	0	L
L CO14493	CO1975085678	B	6ACWC	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	12.702	0	0	0	0	0	0	0	0	L
L SW360209004	CO11801	B	Open	6.86Y	114.3	0.00	11.68	0.00	0	0	0	100	0.00	0.0	12.226	0	0	0	0	0	0	0	0	L
L CO11711	CO11779	B	4ACSR	6.91Y	115.1	0.00	10.87	0.00	0	0	0	100	0.00	0.0	11.629	0	0	0	0	0	0	0	0	L
L CO11780	CO-1564012935	B	4ACSR	6.92Y	115.3	0.00	10.70	0.28	0	2	1	89	0.00	0.0	11.481	0	0	0	0	1	1	1	1	L
L CO14524	CO14523	B	4ACSR	6.94Y	115.7	0.01	10.25	1.85	1	12	4	95	0.00	0.0	11.031	0	0	0	0	2	2	2	1	L
L CO14349	CO14470	B	4ACSR	6.96Y	116.0	0.00	9.99	0.57	0	4	1	97	0.00	0.0	10.841	0	0	0	0	1	1	1	1	L
L CO13897	CO1491683279	B	4ACSR	7.02Y	117.0	0.01	9.00	1.37	1	9	3	95	0.00	0.0	10.320	0	0	0	0	1	1	1	1	L
L CO13931	CO13897	B	4ACSR	7.02Y	117.0	0.00	9.00	0.00	0	0	0	100	0.00	0.0	10.417	0	0	0	0	0	0	0	0	L
L CO13932	CO13897	B	4ACSR	7.02Y	117.0	0.00	9.00	0.00	0	0	0	100	0.00	0.0	10.454	0	0	0	0	0	0	0	0	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total	Notes	
KW	10473	34	0	0	0	0	398	0.00	10906	Lowest Voltage = 100.75	on Element CO13737
KVAR	3444	10	-321	-9	0	0	511		3636	Max Accm VoltD = 25.25	on Element CO13737
										Max Elem VoltD = 7.41	on Element RG300427001

Balanced Voltage Drop Report
Source: MAYSVILLE

Summary

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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru
MAYSVILLE		ABC	MAYSVILLE	15.12Y	126.0	0.00	0.00	240.27	0	10282	3613	94	0.00	0.0	0.000	0	0	0	0	1007
----- Feeder No. 0 (Federal Mogal) Beginning with Device OC739 -----																				
P	CO30683	CO23958	ABC	1/OAAC	15.11Y	125.9	0.01	0.11	24.33	10	680	868	62	0.07	0.0	0.842	0	0	0	40 P
P	CO170561368	CO30683	ABC	2ACSR	15.11Y	125.9	0.02	0.12	22.11	12	577	819	58	0.12	0.0	0.898	0	0	0	15 P
P	CO-1630019527	CO170561368	ABC	2ACSR	15.10Y	125.8	0.03	0.15	22.11	12	577	819	58	0.22	0.0	1.007	0	0	0	15 P
P	CO24380	CO-1630019527	ABC	1/OAAC	15.10Y	125.8	0.01	0.17	17.87	7	415	695	51	0.08	0.0	1.100	0	0	0	8 P
P	CO24379	CO24380	ABC	1/OAAC	15.10Y	125.8	0.04	0.20	17.87	7	415	695	51	0.19	0.0	1.321	0	0	0	1 8 P
P	CO24514	CO24379	ABC	1/OAAC	15.09Y	125.8	0.01	0.22	17.09	7	376	676	49	0.07	0.0	1.416	0	0	0	1 P
P	CO24513	CO24514	ABC	1/OAAC	15.09Y	125.8	0.01	0.23	17.09	7	376	676	49	0.06	0.0	1.499	0	0	0	1 P
P	CO24116	CO24513	ABC	1/OPRIURD	15.09Y	125.8	0.00	0.23	17.09	11	376	676	49	0.04	0.0	1.546	0	0	0	1 1 P
P	CO24388	CO-1630019527	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	4.50	2	162	124	79	0.00	0.0	1.048	0	0	0	1 7 P
P	CO24389	CO24388	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	3.81	1	133	110	77	0.00	0.0	1.089	0	0	0	6 P
P	CO24390	CO24389	ABC	1/OAAC	15.10Y	125.8	0.00	0.16	1.58	1	35	62	49	0.00	0.0	1.285	0	0	0	2 P
P	CO24391	CO24390	ABC	1/OAAC	15.10Y	125.8	0.00	0.16	1.58	1	35	62	49	0.00	0.0	1.332	0	0	0	1 2 P
P	CO24120	CO24391	ABC	1/OPRIURD	15.10Y	125.8	0.00	0.16	1.45	1	32	57	49	0.00	0.0	1.359	0	0	0	1 1 P
----- Feeder No. 0 (Industrial Park) Beginning with Device OC738 -----																				
P	CO23954	CO24739	ABC	336ACSR	15.10Y	125.8	0.00	0.17	10.33	2	358	302	76	0.00	0.0	0.423	0	0	0	9 P
P	CO24736	CO23954	ABC	336ACSR	15.10Y	125.8	0.00	0.17	10.03	2	343	298	75	0.00	0.0	0.453	0	0	0	3 P
P	CO24737	CO24736	ABC	336ACSR	15.10Y	125.8	0.00	0.17	10.03	2	343	298	75	0.00	0.0	0.485	0	0	0	3 P
P	CO24821	CO24737	ABC	1/OPRIURD	15.10Y	125.8	0.00	0.17	9.84	7	334	295	75	0.01	0.0	0.522	0	0	0	2 2 P
P	CO-1366423321	CO-980555440	ABC	2ACSR	15.10Y	125.9	0.04	0.13	65.92	37	2239	1979	75	0.85	0.0	0.188	0	0	0	6 P
P	CO24377	CO-1366423321	ABC	336ACSR	15.10Y	125.9	0.00	0.14	65.92	13	2238	1979	75	0.04	0.0	0.200	0	0	0	6 P
P	CO24738	CO24377	ABC	336ACSR	15.10Y	125.9	0.00	0.14	65.92	13	2238	1979	75	0.02	0.0	0.206	0	0	0	6 P
P	CO24378	CO24738	ABC	1/OPRIURD	15.10Y	125.8	0.06	0.20	65.92	44	2238	1978	75	1.66	0.1	0.348	0	0	0	6 P
P	CO24953	CO24378	ABC	1/OPRIURD	15.09Y	125.8	0.02	0.22	66.12	44	2236	1992	75	0.62	0.0	0.402	0	0	0	3 3 P
P	OH190209003	CO24953	ABC	336ACSR	15.09Y	125.8	0.00	0.22	66.16	13	2235	1995	75	0.03	0.0	0.410	0	0	0	0 P
----- Feeder No. 0 (Moransburg) Beginning with Device OC368987805 -----																				
L	CO24018	CO24866	A	4ACSR	7.01Y	116.8	0.54	9.21	52.37	37	359	84	97	1.55	0.4	5.174	0	0	0	63 L
L	CO24213	CO24018	A	4ACSR	6.98Y	116.3	0.52	9.72	52.37	37	357	83	97	1.47	0.4	5.390	0	0	0	63 L
L	CO24210	CO24213	A	4ACSR	6.95Y	115.9	0.40	10.12	52.37	37	356	82	97	1.13	0.3	5.555	0	0	0	63 L
L	CO24211	CO24210	A	4ACSR	6.94Y	115.7	0.14	10.26	52.37	37	355	82	97	0.39	0.1	5.612	0	0	0	1 63 L
L	CO24549	CO24211	A	4ACSR	6.94Y	115.7	0.00	10.26	1.67	1	11	2	98	0.00	0.0	5.669	0	0	0	1 2 L
L	CO24550	CO24549	A	4ACSR	6.94Y	115.7	0.01	10.27	1.67	1	11	2	98	0.00	0.0	5.735	0	0	0	1 1 L
L	CO23879	CO24211	A	4ACSR	6.89Y	114.8	0.92	11.17	46.01	33	311	72	97	2.29	0.7	6.048	0	0	0	3 54 L
L	CO24230	CO23879	A	4ACSR	6.89Y	114.8	0.00	11.17	0.00	0	0	0	100	0.00	0.0	6.190	0	0	0	1 2 L
L	CO24231	CO24230	A	4ACSR	6.89Y	114.8	0.00	11.17	0.00	0	0	0	100	0.00	0.0	6.285	0	0	0	1 1 L
L	CO-950287320	CO23879	A	2ACSR	6.88Y	114.7	0.14	11.31	42.83	24	288	66	97	0.30	0.1	6.148	0	0	0	0 49 L
L	CO-326617151	CO-950287320	A	2ACSR	6.88Y	114.7	0.00	11.31	0.77	0	5	1	98	0.00	0.0	6.170	0	0	0	2 2 L
L	CO-1104928244	CO-950287320	A	2ACSR	6.88Y	114.6	0.09	11.40	42.06	23	282	65	97	0.21	0.1	6.218	0	0	0	0 47 L
L	CO24214	CO-1104928244	A	4ACSR	6.87Y	114.6	0.01	11.42	5.38	4	36	8	98	0.00	0.0	6.274	0	0	0	0 5 L
L	CO24216	CO24214	A	4ACSR	6.87Y	114.6	0.00	11.42	5.38	4	36	8	98	0.00	0.0	6.286	0	0	0	0 5 L
L	CO24215	CO24216	A	4ACSR	6.87Y	114.5	0.06	11.48	5.38	4	36	8	98	0.02	0.0	6.517	0	0	0	0 5 L
L	CO24020	CO24215	A	4ACSR	6.87Y	114.5	0.01	11.49	1.94	1	13	3	97	0.00	0.0	6.612	0	0	0	2 2 L
L	CO24021	CO24215	A	4ACSR	6.87Y	114.5	0.01	11.49	3.43	2	23	5	98	0.00	0.0	6.612	0	0	0	3 3 L
L	CO24219	CO-1104928244	A	4ACSR	6.86Y	114.4	0.21	11.61	36.68	26	246	56	98	0.41	0.2	6.342	0	0	0	0 42 L
L	CO24217	CO24219	A	4ACSR	6.84Y	114.0	0.35	11.96	36.68	26	245	56	97	0.70	0.3	6.550	0	0	0	0 42 L
L	CO24551	CO24217	A	4ACSR	6.82Y	113.6	0.46	12.42	36.68	26	245	56	97	0.91	0.4	6.822	0	0	0	1 42 L
L	CO24552	CO24551	A	4ACSR	6.80Y	113.4	0.18	12.59	36.68	26	244	55	98	0.36	0.1	6.929	0	0	0	1 41 L
L	CO24218	CO24552	A	4ACSR	6.77Y	112.9	0.50	13.10	34.30	24	228	52	97	0.94	0.4	7.251	0	0	0	0 40 L
L	CO24971	CO24218	A	4ACSR	6.77Y	112.9	0.04	13.14	3.01	2	20	4	98	0.01	0.0	7.535	0	0	0	0 3 L
L	CO23995	CO24971	A	4ACSR	6.77Y	112.9	0.01	13.14	1.16	1	8	2	97	0.00	0.0	7.648	0	0	0	1 1 L
L	CO23996	CO24971	A	4ACSR	6.77Y	112.8	0.01	13.15	1.82	1	12	3	97	0.00	0.0	7.677	0	0	0	1 1 L
L	CO24870	CO24971	A	2ACSR	6.77Y	112.9	0.00	13.14	0.03	0	0	0	100	0.00	0.0	7.585	0	0	0	1 1 L
L	CO24022	CO24218	A	4ACSR	6.77Y	112.9	0.00	13.10	0.00	0	0	0	100	0.00	0.0	7.345	0	0	0	1 1 L
L	CO24871	CO24218	A	4ACSR	6.76Y	112.7	0.17	13.27	31.29	22	207	47	98	0.30	0.1	7.373	0	0	0	0 36 L
L	CO24553	CO24871	A	4ACSR	6.75Y	112.5	0.21	13.49	31.29	22	206	46	98	0.36	0.2	7.522	0	0	0	1 35 L
L	CO24554	CO24553	A	4ACSR	6.75Y	112.5	0.04	13.53	29.80	21	196	44	98	0.07	0.0	7.554	0	0	0	0 34 L
L	CO24181	CO24554	A	4ACSR	6.74Y	112.3	0.18	13.71	29.80	21	196	44	98	0.29	0.1	7.686	0	0	0	0 34 L
L	CO24182	CO24181	A	4ACSR	6.73Y	112.2	0.08	13.79	29.80	21	196	44	98	0.13	0.1	7.743	0	0	0	0 34 L
L	CO24173	CO24182	A	4ACSR	6.71Y	111.8	0.46	14.25	29.62	21	195	44	98	0.74	0.4	8.084	0	0	0	0 33 L
L	CO24555	CO24173	A	4ACSR	6.70Y	111.7	0.04	14.29	29.62	21	194	43	98	0.07	0.0	8.115	0	0	0	1 33 L
L	CO24556	CO24555	A	4ACSR	6.70Y	111.6	0.11	1												

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L CO23867	CO24563	A	4ACSR	6.65Y	110.8	0.03	15.23	13.49	10	88	19	98	0.03	0.0	8.992	0	0	0	2	18	L
L CO24565	CO23867	A	4ACSR	6.64Y	110.7	0.02	15.25	12.93	9	84	18	98	0.02	0.0	9.032	0	0	0	1	16	L
L CO-910681593	CO24565	A	2ACSR	6.64Y	110.7	0.01	15.26	10.52	6	68	15	98	0.00	0.0	9.047	0	0	0	0	15	L
L CO-411679842	CO-910681593	A	2ACSR	6.64Y	110.7	0.01	15.27	9.61	5	62	14	98	0.01	0.0	9.089	0	0	0	0	12	L
L CO268968995	CO-411679842	A	4ACSR	6.64Y	110.7	0.02	15.29	7.95	6	52	11	98	0.01	0.0	9.133	0	0	0	1	4	L
L CO-377622422	CO268968995	A	2ACSR	6.64Y	110.7	0.01	15.30	6.03	3	39	9	97	0.00	0.0	9.190	0	0	0	3	3	L
L CO-1435587402	CO-411679842	A	4ACSR	6.64Y	110.7	0.00	15.27	1.67	1	11	2	98	0.00	0.0	9.148	0	0	0	1	8	L
L CO24564	CO-1435587402	A	4ACSR	6.64Y	110.7	0.01	15.28	1.47	1	10	2	98	0.00	0.0	9.228	0	0	0	0	7	L
L CO24183	CO24564	A	4ACSR	6.64Y	110.7	0.00	15.28	1.47	1	10	2	98	0.00	0.0	9.285	0	0	0	0	7	L
L CO23868	CO24183	A	4ACSR	6.64Y	110.7	0.01	15.29	1.47	1	10	2	98	0.00	0.0	9.456	0	0	0	0	5	L
L CO24185	CO23868	A	4ACSR	6.64Y	110.7	0.01	15.30	1.18	1	8	2	97	0.00	0.0	9.550	0	0	0	3	3	L
L CO23997	CO23868	A	4ACSR	6.64Y	110.7	0.00	15.29	0.29	0	2	0	100	0.00	0.0	9.512	0	0	0	2	2	L
L CO24767	CO24183	A	4ACSR	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.353	0	0	0	1	1	L
L CO24807	CO24767	A	4ACSR	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.405	0	0	0	0	0	L
L CO24808	CO24807	A	4ACSR	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.411	0	0	0	0	0	L
L SW744-A	CO24808	A	Open	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.411	0	0	0	0	0	L
L CO24445	CO24183	A	4ACSR	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.342	0	0	0	0	1	L
L CO24446	CO24445	A	4ACSR	6.64Y	110.7	0.00	15.28	0.00	0	0	0	100	0.00	0.0	9.418	0	0	0	1	1	L
L CO80649000	CO-910681593	A	2ACSR	6.64Y	110.7	0.00	15.26	0.91	1	6	1	99	0.00	0.0	9.101	0	0	0	3	3	L
L CO23998	CO24563	A	4ACSR	6.65Y	110.8	0.00	15.20	1.18	1	8	2	97	0.00	0.0	9.011	0	0	0	2	2	L
L CO24443	CO24561	A	4ACSR	6.66Y	110.9	0.00	15.06	4.74	3	31	7	98	0.00	0.0	8.741	0	0	0	0	2	L
L CO24444	CO24443	A	4ACSR	6.66Y	110.9	0.01	15.06	4.74	3	31	7	98	0.00	0.0	8.780	0	0	0	2	2	L
L CO24178	CO24182	A	4ACSR	6.73Y	112.2	0.00	13.79	0.18	0	1	0	100	0.00	0.0	7.804	0	0	0	0	1	L
L CO24180	CO24178	A	4ACSR	6.73Y	112.2	0.00	13.79	0.18	0	1	0	100	0.00	0.0	7.918	0	0	0	0	1	L
L CO24179	CO24180	A	4ACSR	6.73Y	112.2	0.00	13.79	0.18	0	1	0	100	0.00	0.0	8.025	0	0	0	0	1	L
L CO24891	CO24179	A	4ACSR	6.73Y	112.2	0.00	13.79	0.18	0	1	0	100	0.00	0.0	8.206	0	0	0	1	1	L
L CO23999	CO24871	A	2ACSR	6.76Y	112.7	0.00	13.27	0.00	0	0	0	100	0.00	0.0	7.412	0	0	0	1	1	L
L CO23880	CO24211	A	4ACSR	6.94Y	115.7	0.03	10.28	2.03	1	14	3	98	0.00	0.0	5.896	0	0	0	0	6	L
L CO24233	CO23880	A	4ACSR	6.94Y	115.7	0.01	10.29	0.90	1	6	1	99	0.00	0.0	6.172	0	0	0	1	4	L
L CO24232	CO24233	A	4ACSR	6.94Y	115.7	0.00	10.30	0.60	0	4	1	97	0.00	0.0	6.261	0	0	0	3	3	L
L CO24019	CO23880	A	4ACSR	6.94Y	115.7	0.01	10.29	1.13	1	8	2	97	0.00	0.0	6.048	0	0	0	2	2	L
L CO23897	CO23926	B	4ACSR	7.00Y	116.6	1.34	9.38	40.32	29	278	65	97	2.94	1.1	8.836	0	0	0	0	53	L
L CO23898	CO23897	B	4ACSR	6.99Y	116.5	0.10	9.49	40.32	29	275	63	97	0.23	0.1	8.892	0	0	0	0	51	L
L CO23899	CO23898	B	4ACSR	6.97Y	116.2	0.27	9.75	38.57	28	263	60	97	0.56	0.2	9.043	0	0	0	2	49	L
L CO24238	CO23899	B	4ACSR	6.97Y	116.2	0.02	9.77	36.85	26	251	57	98	0.04	0.0	9.054	0	0	0	0	45	L
L CO24239	CO24238	B	4ACSR	6.97Y	116.1	0.13	9.90	36.85	26	251	57	98	0.26	0.1	9.133	0	0	0	3	45	L
L CO24869	CO24239	B	4ACSR	6.95Y	115.8	0.31	10.21	32.77	23	222	51	97	0.55	0.2	9.338	0	0	0	0	40	L
L CO24713	CO24869	B	4ACSR	6.92Y	115.4	0.42	10.63	32.77	23	222	51	97	0.74	0.3	9.616	0	0	0	0	40	L
L CO24198	CO24713	B	4ACSR	6.92Y	115.3	0.11	10.74	32.61	23	220	50	98	0.19	0.1	9.689	0	0	0	2	39	L
L CO24714	CO24198	B	4ACSR	6.91Y	115.2	0.04	10.77	29.77	21	201	46	97	0.06	0.0	9.716	0	0	0	0	37	L
L CO24715	CO24714	B	4ACSR	6.91Y	115.1	0.14	10.91	29.77	21	201	46	97	0.23	0.1	9.820	0	0	0	0	37	L
L CO23870	CO24715	B	4ACSR	6.90Y	115.0	0.04	10.96	29.23	21	197	45	97	0.07	0.0	9.852	0	0	0	0	35	L
L CO23871	CO23870	B	4ACSR	6.89Y	114.9	0.15	11.10	29.23	21	197	45	97	0.23	0.1	9.962	0	0	0	0	34	L
L CO23869	CO23871	B	4ACSR	6.88Y	114.7	0.24	11.34	29.23	21	197	45	97	0.38	0.2	10.139	0	0	0	0	33	L
L CO23872	CO23869	B	4ACSR	6.88Y	114.6	0.06	11.40	28.27	20	190	43	98	0.10	0.1	10.187	0	0	0	0	32	L
L CO24201	CO23872	B	4ACSR	6.87Y	114.5	0.07	11.47	27.63	20	185	42	98	0.11	0.1	10.244	0	0	0	1	31	L
L CO24199	CO24201	B	4ACSR	6.86Y	114.4	0.14	11.61	27.19	19	182	41	98	0.21	0.1	10.358	0	0	0	0	30	L
L CO24200	CO24199	B	4ACSR	6.86Y	114.3	0.11	11.72	25.58	18	171	39	97	0.15	0.1	10.452	0	0	0	0	29	L
L CO24007	CO24200	B	4ACSR	6.86Y	114.3	0.00	11.73	0.84	1	6	1	99	0.00	0.0	10.480	0	0	0	1	1	L
L CO23873	CO24007	B	4ACSR	6.85Y	114.1	0.13	11.86	24.74	18	165	37	98	0.18	0.1	10.569	0	0	0	0	28	L
L CO24826	CO23873	B	4ACSR	6.85Y	114.1	0.01	11.86	24.73	18	165	37	98	0.01	0.0	10.576	0	0	0	0	27	L
L OC729	CO24826	B	25 H OCR	6.85Y	114.1	0.00	11.86	24.73	99	165	37	98	0.00	0.0	10.576	0	0	0	0	27	L
L CO24827	OC729	B	4ACSR	6.83Y	113.9	0.25	12.12	24.73	18	165	37	98	0.34	0.2	10.801	0	0	0	0	27	L
L CO24204	CO24827	B	4ACSR	6.83Y	113.9	0.01	12.13	22.12	16	147	33	98	0.02	0.0	10.815	0	0	0	0	26	L
L CO24202	CO24204	B	4ACSR	6.82Y	113.6	0.27	12.40	22.12	16	147	33	98	0.32	0.2	11.082	0	0	0	0	26	L
L CO24716	CO24202	B	2ACSR	6.80Y	113.4	0.22	12.63	21.99	12	146	33	98	0.26	0.2	11.403	0	0	0	1	25	L
L CO1067505392	CO24716	B	2ACSR	6.80Y	113.3	0.11	12.74	20.71	12	137	31	98	0.12	0.1	11.574	0	0	0	0	23	L
L CO24717	CO1067505392	B	4ACSR	6.79Y	113.1	0.16	12.90	20.71	15	137	31	98	0.18	0.1	11.742	0	0	0	1	23	L
L CO24203	CO24717	B	4ACSR	6.75Y	112.6	0.54	13.44	20.35	15	135	30	98	0.60	0.4	12.328	0	0	0	2	22	L
L CO24718	CO24203	B	4ACSR	6.74Y	112.4	0.16	13.60	18.98	14	125	28	98	0.16	0.1	12.513	0	0	0	0	19	L
L CO24872	CO24718	B	4ACSR	6.74Y	112.3	0.08	13.68	17.42	12	115	25	98	0.07	0.1	12.608	0	0	0	2	18	L
L CO24719	CO24872	B	4ACSR	6.74Y	112.3	0.04	13.72	15.25	11	100	22	98	0.03	0.0	12.666	0	0	0	0	16	L
L CO23983	CO24719	B	4ACSR	6.74Y	112.3	0.01	13.72	2.02	1	13	3	97	0.00	0.0	12.742	0	0	0	1	1	L
L CO24158	CO24719	B	2ACSR	6.73Y	112.2	0.05	13.77	13.23	7	87	19	98	0.03	0.0	12.785	0	0	0	1	15	L
L CO1529796732	CO24158	B	2ACSR	6.73Y	112.2	0.00	13.77	1.08	1	7	2	96	0.00	0.0	12.818	0	0	0	1	1	L
L CO-1478262125	CO24158	B	2ACSR	6.73Y	112.2	0.02	13.78	12.11	7	80	18	98	0.01	0.0	12.825	0	0	0	0	13	L

Balanced Voltage Drop Report
Source: MAYSVILLE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru
L	CO-1671292490		B 2ACSR	6.79Y	113.1	0.00	12.90	0.00	0	0	0	100	0.00	0.0	11.812	0	0	0	0	L
L	CO-1918465395		B 2ACSR	6.80Y	113.4	0.00	12.63	0.00	0	0	0	100	0.00	0.0	11.459	0	0	0	1	L
L	CO24025		B 4ACSR	6.82Y	113.6	0.00	12.40	0.13	0	1	0	100	0.00	0.0	11.136	0	0	0	1	L
L	CO24229		B 4ACSR	6.83Y	113.9	0.01	12.12	2.61	2	17	4	97	0.00	0.0	10.843	0	0	0	0	L
L	CO24227		B 4ACSR	6.83Y	113.9	0.02	12.14	2.61	2	17	4	97	0.00	0.0	10.981	0	0	0	0	L
L	CO24228		B 4ACSR	6.83Y	113.9	0.00	12.14	2.61	2	17	4	97	0.00	0.0	11.019	0	0	0	1	L
L	CO24008		B 4ACSR	6.85Y	114.1	0.00	11.86	0.02	0	0	0	100	0.00	0.0	10.649	0	0	0	1	L
L	CO1492077296		B 2ACSR	6.86Y	114.4	0.00	11.62	1.60	1	11	2	98	0.00	0.0	10.435	0	0	0	1	L
L	CO24223		B 4ACSR	6.88Y	114.6	0.00	11.41	0.64	0	4	1	97	0.00	0.0	10.358	0	0	0	0	L
L	CO24224		B 4ACSR	6.88Y	114.6	0.00	11.41	0.64	0	4	1	97	0.00	0.0	10.413	0	0	0	1	L
L	CO24006		B 4ACSR	6.88Y	114.7	0.00	11.34	0.96	1	6	1	99	0.00	0.0	10.165	0	0	0	1	L
L	CO24225		B 4ACSR	6.89Y	114.9	0.00	11.10	0.00	0	0	0	100	0.00	0.0	10.082	0	0	0	0	L
L	CO24226		B 4ACSR	6.89Y	114.9	0.00	11.10	0.00	0	0	0	100	0.00	0.0	10.314	0	0	0	1	L
L	CO24005		B 4ACSR	6.90Y	115.0	0.00	10.96	0.00	0	0	0	100	0.00	0.0	9.975	0	0	0	1	L
L	CO24003		B 4ACSR	6.91Y	115.1	0.00	10.91	0.54	0	4	1	97	0.00	0.0	9.873	0	0	0	2	L
L	CO24004		B 4ACSR	6.92Y	115.4	0.00	10.63	0.15	0	1	0	100	0.00	0.0	9.682	0	0	0	1	L
L	CO23921		B 4/OACSR	6.97Y	116.1	0.00	9.90	0.00	0	0	0	100	0.00	0.0	9.379	0	0	0	2	L
L	CO23922		B 4/OACSR	6.97Y	116.2	0.00	9.75	0.49	0	3	1	95	0.00	0.0	9.309	0	0	0	2	L
L	CO24041		B 4ACSR	6.99Y	116.5	0.00	9.49	1.74	1	12	3	97	0.00	0.0	8.949	0	0	0	2	L
L	CO23923		B 4/OACSR	7.00Y	116.6	0.00	9.38	0.00	0	0	0	100	0.00	0.0	9.061	0	0	0	2	L
P	CO24878		C 1/OPRIURD	7.40Y	123.4	0.00	2.60	-0.01	0	0	0	100	0.00	0.0	2.815	0	0	0	0	P
P	CO24786		C 1/OPRIURD	7.40Y	123.3	0.00	2.65	-0.01	0	0	0	100	0.00	0.0	2.933	0	0	0	2	P
P	UD140763002		C 1/OPRIURD	7.40Y	123.3	0.00	2.65	-0.01	0	0	0	100	0.00	0.0	2.939	0	0	0	0	P
P	UD140763004		C 1/OPRIURD	7.40Y	123.3	0.00	2.65	-0.00	0	0	0	100	0.00	0.0	2.944	0	0	0	0	P

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total		
KW	9838	197	0	0	0	0	247	0.00	10282	Lowest Voltage = 110.70	on Element CO24185
KVAR	5080	141	-1793	-105	0	0	290		3613	Max Accm VoltD = 15.30	on Element CO24185
										Max Elem VoltD = 6.25	on Element RG14

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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Table with columns: Element Name, Parent Name, Cnf, Type/Conductor, Pri kV, Base Volt, Element Drop, Accum Drop, Thru Amps, % Cap, Thru KW, KVAR, % PF, kW Loss, % Loss, mi From Src, Length (mi), Element KW, KVAR, Cons On, Cons Thru. Includes sections for Feeder No. 0 (Strodes Run), Feeder No. 0 (Barret Pk), and Feeder No. 0 (Stone Wall).

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Summary

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L CO918553331	CO30445	B	2ACSR	13.80Y	115.0	0.00	11.00	0.08	0	1	0	100	0.00	0.0	10.711	0	0	0	1	1	L
L CO1349561631	CO30445	B	2ACSR	13.80Y	115.0	0.02	11.02	11.09	6	152	15	100	0.02	0.0	10.761	0	0	0	0	23	L
L CO27031	CO1349561631	B	4ACSR	13.80Y	115.0	0.00	11.02	0.85	1	12	1	100	0.00	0.0	10.799	0	0	0	1	1	L
L OH240869003	CO27031	B	4ACSR	13.80Y	115.0	0.00	11.02	0.00	0	0	0	100	0.00	0.0	10.859	0	0	0	0	0	L
L CO27003	CO1349561631	B	6ACWC	13.79Y	115.0	0.02	11.04	9.85	7	135	14	99	0.03	0.0	10.876	0	0	0	0	22	L
L CO-1455289611	CO27003	B	2ACSR	13.79Y	115.0	0.01	11.05	9.85	5	135	14	99	0.01	0.0	10.912	0	0	0	1	22	L
L CO937589493	CO-1455289611	B	2ACSR	13.79Y	114.9	0.00	11.05	0.54	0	7	1	99	0.00	0.0	10.952	0	0	0	1	1	L
L CO27008	CO-1455289611	B	6ACWC	13.79Y	114.9	0.02	11.07	9.31	7	128	13	99	0.02	0.0	11.004	0	0	0	1	20	L
L CO27007	CO27008	B	6ACWC	13.79Y	114.9	0.00	11.07	8.28	6	114	12	99	0.00	0.0	11.025	0	0	0	1	19	L
L OH240869002	CO27007	B	6ACWC	13.79Y	114.9	0.02	11.09	7.66	5	105	11	99	0.02	0.0	11.148	0	0	0	0	18	L
L CO27009	OH240869002	B	6ACWC	13.79Y	114.9	0.01	11.11	7.66	5	105	11	99	0.01	0.0	11.229	0	0	0	0	18	L
L CO27040	CO27009	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.258	0	0	0	1	2	L
L CO27041	CO27040	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.311	0	0	0	0	1	L
L CO27042	CO27041	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.430	0	0	0	0	1	L
L CO27043	CO27042	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.523	0	0	0	0	1	L
L CO27044	CO27043	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.664	0	0	0	0	1	L
L CO27047	CO27044	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.884	0	0	0	0	1	L
L CO27048	CO27047	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.932	0	0	0	0	1	L
L CO27046	CO27048	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	11.992	0	0	0	0	1	L
L CO27045	CO27046	B	6ACWC	13.79Y	114.9	0.00	11.11	0.29	0	4	0	100	0.00	0.0	12.181	0	0	0	1	1	L
L CO27057	CO27009	B	6ACWC	13.79Y	114.9	0.01	11.11	1.18	1	16	2	99	0.00	0.0	11.473	0	0	0	0	2	L
L CO27058	CO27057	B	6ACWC	13.79Y	114.9	0.00	11.11	0.41	0	6	1	99	0.00	0.0	11.606	0	0	0	1	2	L
L CO27056	CO27058	B	6ACWC	13.79Y	114.9	0.00	11.11	0.41	0	6	1	99	0.00	0.0	11.741	0	0	0	0	1	L
L CO27025	CO27056	B	4ACSR	13.79Y	114.9	0.00	11.11	0.00	0	0	0	100	0.00	0.0	11.862	0	0	0	0	0	L
L CO27026	CO27056	B	4ACSR	13.79Y	114.9	0.00	11.11	0.41	0	6	1	99	0.00	0.0	11.788	0	0	0	1	1	L
L CO331560450	CO27009	B	2ACSR	13.79Y	114.9	0.01	11.11	6.19	3	85	9	99	0.01	0.0	11.320	0	0	0	0	14	L
L CO27028	CO331560450	B	4ACSR	13.79Y	114.9	0.00	11.11	0.42	0	6	1	99	0.00	0.0	11.402	0	0	0	0	1	L
L CO-1277141141	CO27028	B	2ACSR	13.79Y	114.9	0.00	11.11	0.42	0	6	1	99	0.00	0.0	11.455	0	0	0	1	1	L
L CO1017776419	CO331560450	B	2ACSR	13.79Y	114.9	0.01	11.12	5.76	3	79	8	99	0.00	0.0	11.382	0	0	0	0	13	L
L CO27130	CO1017776419	B	6ACWC	13.78Y	114.9	0.01	11.13	5.76	4	79	8	99	0.00	0.0	11.438	0	0	0	0	13	L
L CO97364582	CO27130	B	2ACSR	13.78Y	114.9	0.00	11.13	0.74	0	10	1	100	0.00	0.0	11.466	0	0	0	1	1	L
L CO540781478	CO27130	B	2ACSR	13.78Y	114.9	0.01	11.13	5.02	3	69	7	99	0.00	0.0	11.519	0	0	0	0	12	L
L CO-244926303	CO540781478	B	6ACWC	13.78Y	114.9	0.01	11.14	5.02	4	69	7	99	0.01	0.0	11.621	0	0	0	1	12	L
L CO27033	CO-244926303	B	4ACSR	13.78Y	114.9	0.00	11.14	0.74	1	10	1	100	0.00	0.0	11.678	0	0	0	1	1	L
L CO27126	CO-244926303	B	6ACWC	13.78Y	114.9	0.00	11.15	4.06	3	56	6	99	0.00	0.0	11.671	0	0	0	1	10	L
L CO27127	CO27126	B	6ACWC	13.78Y	114.8	0.01	11.15	3.11	2	43	4	100	0.00	0.0	11.766	0	0	0	0	9	L
L CO27053	CO27127	B	4ACSR	13.78Y	114.8	0.00	11.16	3.11	2	43	4	100	0.00	0.0	11.831	0	0	0	0	9	L
L CO27055	CO27053	B	4ACSR	13.78Y	114.8	0.00	11.16	0.66	0	9	1	99	0.00	0.0	11.983	0	0	0	2	2	L
L CO27006	CO27053	B	6ACWC	13.78Y	114.8	0.00	11.16	2.32	2	32	3	100	0.00	0.0	11.884	0	0	0	0	7	L
L CO27054	CO27006	B	4ACSR	13.78Y	114.8	0.00	11.16	0.90	1	12	1	100	0.00	0.0	11.913	0	0	0	2	2	L
L CO27032	CO27006	B	4ACSR	13.78Y	114.8	0.00	11.16	1.43	1	20	2	100	0.00	0.0	11.954	0	0	0	1	5	L
L CO27005	CO27032	B	6ACWC	13.78Y	114.8	0.00	11.16	0.72	1	10	1	100	0.00	0.0	12.062	0	0	0	0	4	L
L CO27051	CO27005	B	4ACSR	13.78Y	114.8	0.00	11.17	0.57	0	8	1	99	0.00	0.0	12.157	0	0	0	1	3	L
L CO27049	CO27051	B	4ACSR	13.78Y	114.8	0.00	11.17	0.00	0	0	0	100	0.00	0.0	12.516	0	0	0	0	1	L
L CO27050	CO27049	B	4ACSR	13.78Y	114.8	0.00	11.17	0.00	0	0	0	100	0.00	0.0	12.631	0	0	0	1	1	L
L CO27027	CO27051	B	4ACSR	13.78Y	114.8	0.00	11.17	0.45	0	6	1	99	0.00	0.0	12.232	0	0	0	1	1	L
L CO27052	CO27005	B	4ACSR	13.78Y	114.8	0.00	11.16	0.12	0	2	0	100	0.00	0.0	12.098	0	0	0	1	1	L
L CO-1834350890	CO1017776419	B	2ACSR	13.79Y	114.9	0.00	11.12	0.00	0	0	0	100	0.00	0.0	11.416	0	0	0	0	0	L
L CO795186445	OH240659001	B	2ACSR	13.81Y	115.1	0.00	10.93	0.54	0	7	1	99	0.00	0.0	10.389	0	0	0	0	6	L
L CO27224	CO795186445	B	4ACSR	13.81Y	115.1	0.00	10.93	0.45	0	6	1	99	0.00	0.0	10.493	0	0	0	2	6	L
L CO27225	CO27224	B	4ACSR	13.81Y	115.1	0.00	10.93	0.40	0	6	1	99	0.00	0.0	10.597	0	0	0	2	2	L
L CO-1535687699	CO27224	B	2ACSR	13.81Y	115.1	0.00	10.93	0.04	0	0	0	100	0.00	0.0	10.589	0	0	0	1	1	L
L CO1402558860	CO27224	B	2ACSR	13.81Y	115.1	0.00	10.93	0.01	0	0	0	100	0.00	0.0	10.592	0	0	0	1	1	L
L CO1699863868	OH240869001	B	2ACSR	13.81Y	115.1	0.00	10.90	0.16	0	2	0	100	0.00	0.0	10.203	0	0	0	0	0	L
L CO30386	OH240869001	B	4ACSR	13.81Y	115.1	0.00	10.90	0.08	0	1	0	100	0.00	0.0	10.239	0	0	0	1	1	L
L CO29692	CO29694	B	6ACWC	13.84Y	115.3	0.00	10.70	0.17	0	2	0	100	0.00	0.0	9.272	0	0	0	1	1	L
L CO29698	CO1208611609	B	2ACSR	13.84Y	115.4	0.00	10.64	0.00	0	0	0	100	0.00	0.0	9.152	0	0	0	0	0	L
L FSE1391	CO29667	A	20 N FUSE	13.88Y	115.7	0.00	10.31	10.49	59	145	15	99	0.00	0.0	7.495	0	0	0	0	43	L
L CO29547	FSE1391	A	2ACSR	13.88Y	115.7	0.01	10.33	10.49	6	145	15	99	0.02	0.0	7.589	0	0	0	1	43	L
L CO29728	CO29547	A	6ACWC	13.88Y	115.7	0.00	10.33	9.64	7	133	14	99	0.00	0.0	7.592	0	0	0	0	42	L
L OC924	CO29728	A	70 L OCR	13.88Y	115.7	0.00	10.33	9.64	14	133	14	99	0.00	0.0	7.592	0	0	0	0	42	L
L CO29729	OC924	A	2ACSR	13.88Y	115.7	0.00	10.33	8.58	5	118	12	99	0.00	0.0	7.621	0	0	0	1	40	L
L CO29678	CO29729	A	2ACSR	13.88Y	115.7	0.02	10.35	8.43	5	116	12	99	0.02	0.0	7.770	0	0	0	0	39	L
L CO29544	CO29678	A	2ACSR	13.88Y	115.6	0.01	10.36	7.51	4	104	11	99	0.01	0.0	7.853	0	0	0	2	37	L
L OH190542002	CO29544	A	2ACSR	13.87Y	115.6	0.02	10.38	6.78	4	94	10	99	0.02	0.0	8.080	0	0	0	0	35	L
L OH190552001	OH190542002	A	2ACSR	13.87Y	115.6	0.02	10.40	6.													

Balanced Voltage Drop Report
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Summary

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		Units Displayed In Volts																			
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru	
L CO29600	CO29573	A	2ACSR	13.87Y	115.6	0.00	10.43	4.86	3	67	7	99	0.00	0.0	8.624	0	0	0	1	23	L
L CO29572	CO29600	A	4ACSR	13.87Y	115.6	0.00	10.44	4.86	3	67	7	99	0.00	0.0	8.653	0	0	0	0	22	L
L CO29682	CO29572	A	6ACWC	13.87Y	115.6	0.01	10.44	4.83	3	67	7	99	0.00	0.0	8.711	0	0	0	0	22	L
L CO29683	CO29682	A	6ACWC	13.87Y	115.6	0.00	10.44	0.23	0	3	0	100	0.00	0.0	8.746	0	0	0	2	2	L
L CO29684	CO29682	A	2ACSR	13.87Y	115.6	0.01	10.45	4.60	3	63	6	100	0.00	0.0	8.821	0	0	0	0	20	L
L CO29685	CO29684	A	6ACWC	13.87Y	115.5	0.01	10.46	4.57	3	63	6	100	0.00	0.0	8.898	0	0	0	1	18	L
L CO29688	CO29685	A	6ACWC	13.86Y	115.5	0.01	10.46	4.19	3	58	6	99	0.00	0.0	8.969	0	0	0	1	17	L
L OH190553001	CO29688	A	6ACWC	13.86Y	115.5	0.01	10.48	4.19	3	58	6	99	0.01	0.0	9.121	0	0	0	0	16	L
L CO29689	OH190553001	A	6ACWC	13.86Y	115.5	0.01	10.49	4.19	3	58	6	99	0.01	0.0	9.271	0	0	0	1	16	L
L CO30508	CO29689	A	6ACWC	13.86Y	115.5	0.02	10.51	4.07	3	56	6	99	0.01	0.0	9.527	0	0	0	2	14	L
L CO29367	CO30508	A	6ACWC	13.86Y	115.5	0.01	10.53	3.87	3	53	5	100	0.01	0.0	9.681	0	0	0	0	12	L
L CO29313	CO29367	A	6ACWC	13.86Y	115.5	0.01	10.53	3.84	3	53	5	100	0.00	0.0	9.764	0	0	0	0	12	L
L CO29387	CO29313	A	6ACWC	13.86Y	115.5	0.01	10.54	3.84	3	53	5	100	0.00	0.0	9.830	0	0	0	0	12	L
L CO29388	CO29387	A	6ACWC	13.85Y	115.5	0.01	10.55	3.84	3	53	5	100	0.00	0.0	9.917	0	0	0	0	12	L
L CO29390	CO29388	A	6ACWC	13.85Y	115.4	0.01	10.55	3.84	3	53	5	100	0.00	0.0	9.979	0	0	0	2	12	L
L CO29389	CO29390	A	6ACWC	13.85Y	115.4	0.01	10.56	2.98	2	41	4	100	0.00	0.0	10.110	0	0	0	1	10	L
L CO29391	CO29389	A	6ACWC	13.85Y	115.4	0.00	10.56	2.40	2	33	3	100	0.00	0.0	10.180	0	0	0	0	9	L
L CO29392	CO29391	A	6ACWC	13.85Y	115.4	0.00	10.57	2.40	2	33	3	100	0.00	0.0	10.234	0	0	0	0	9	L
L CO29393	CO29392	A	6ACWC	13.85Y	115.4	0.00	10.57	2.32	2	32	3	100	0.00	0.0	10.285	0	0	0	0	7	L
L CO29328	CO29393	A	6ACWC	13.85Y	115.4	0.00	10.57	0.29	0	4	0	100	0.00	0.0	10.341	0	0	0	1	1	L
L CO29394	CO29393	A	6ACWC	13.85Y	115.4	0.01	10.58	2.03	1	28	3	99	0.00	0.0	10.498	0	0	0	0	6	L
L CO29312	CO29394	A	6ACWC	13.85Y	115.4	0.01	10.58	2.03	1	28	3	99	0.00	0.0	10.624	0	0	0	0	5	L
L CO29314	CO29312	A	6ACWC	13.85Y	115.4	0.00	10.58	1.94	1	27	3	99	0.00	0.0	10.662	0	0	0	0	4	L
L CO29326	CO29314	A	6ACWC	13.85Y	115.4	0.00	10.58	0.00	0	0	0	100	0.00	0.0	10.804	0	0	0	1	2	L
L CO360074577	CO29326	A	2ACSR	13.85Y	115.4	0.00	10.58	0.00	0	0	0	100	0.00	0.0	10.857	0	0	0	0	1	L
L CO162481232	CO360074577	A	2ACSR	13.85Y	115.4	0.00	10.58	0.00	0	0	0	100	0.00	0.0	10.927	0	0	0	1	1	L
L CO29404	CO29314	A	6ACWC	13.85Y	115.4	0.00	10.59	1.94	1	27	3	99	0.00	0.0	10.756	0	0	0	1	2	L
L CO29405	CO29404	A	6ACWC	13.85Y	115.4	0.00	10.59	1.15	1	16	2	99	0.00	0.0	10.795	0	0	0	1	1	L
L CO29330	CO29312	A	6ACWC	13.85Y	115.4	0.00	10.58	0.09	0	1	0	100	0.00	0.0	10.700	0	0	0	1	1	L
L CO29325	CO29394	A	6ACWC	13.85Y	115.4	0.00	10.58	0.00	0	0	0	100	0.00	0.0	10.563	0	0	0	1	1	L
L CO29327	CO29392	A	6ACWC	13.85Y	115.4	0.00	10.57	0.08	0	1	0	100	0.00	0.0	10.326	0	0	0	2	2	L
L CO29366	CO29689	A	6ACWC	13.86Y	115.5	0.00	10.49	0.11	0	2	0	100	0.00	0.0	9.366	0	0	0	1	1	L
L CO29601	CO29684	A	2ACSR	13.87Y	115.6	0.00	10.45	0.03	0	0	0	100	0.00	0.0	8.896	0	0	0	1	2	L
L CO29686	CO29601	A	6ACWC	13.87Y	115.6	0.00	10.45	0.01	0	0	0	100	0.00	0.0	9.143	0	0	0	0	1	L
L CO29687	CO29686	A	6ACWC	13.87Y	115.6	0.00	10.45	0.00	0	0	0	100	0.00	0.0	9.227	0	0	0	1	1	L
L OH190542001	OH190542002	A	2ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.199	0	0	0	0	2	L
L OH190543001	OH190542001	A	2ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.350	0	0	0	0	2	L
L CO29659	OH190543001	A	4ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.473	0	0	0	1	2	L
L CO29658	CO29659	A	4ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.606	0	0	0	0	1	L
L CO29657	CO29658	A	4ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.682	0	0	0	1	1	L
L OH190543002	CO29657	A	4ACSR	13.87Y	115.6	0.00	10.38	0.00	0	0	0	100	0.00	0.0	8.965	0	0	0	0	0	L
L CO29566	CO29678	A	6ACWC	13.88Y	115.7	0.00	10.35	0.92	1	13	1	100	0.00	0.0	7.792	0	0	0	2	2	L
L CO29602	OC924	A	2ACSR	13.88Y	115.7	0.00	10.33	1.06	1	15	1	100	0.00	0.0	7.630	0	0	0	1	2	L
L CO-1647800782	CO29602	A	2ACSR	13.88Y	115.7	0.00	10.33	0.33	0	5	0	100	0.00	0.0	7.675	0	0	0	1	1	L
L CO29732	CO29662	ABC	1/0ACSR	13.89Y	115.7	0.01	10.26	147.51	64	6112	653	99	0.50	0.0	7.162	0	0	0	0	1295	L
L OC967	CO29732	ABC	WVE	13.89Y	115.7	0.00	10.26	147.51	0	6112	652	99	0.00	0.0	7.162	0	0	0	0	1295	L
L CO29733	OC967	ABC	1/0ACSR	13.84Y	115.3	0.40	10.66	147.51	64	6112	652	99	19.39	0.3	7.496	0	0	0	0	1295	L
L FSE1488	CO29733	A	20 N FUSE	13.84Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	7.496	0	0	0	0	2	L
L CO29706	FSE1488	A	4ACSR	13.84Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	7.629	0	0	0	1	2	L
L CO29707	CO29706	A	4ACSR	13.84Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	7.724	0	0	0	1	1	L
L FSE1489	CO29733	C	20 N FUSE	13.84Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	7.496	0	0	0	0	1	L
L CO29571	FSE1489	C	4ACSR	13.84Y	115.3	0.00	10.66	0.00	0	0	0	100	0.00	0.0	7.572	0	0	0	1	1	L
L CO29708	CO29733	ABC	1/0ACSR	13.81Y	115.1	0.26	10.92	147.51	64	6092	634	99	12.63	0.2	7.714	0	0	0	0	1292	L
L CO30406	CO29708	ABC	1/0ACSR	13.76Y	114.6	0.45	11.37	147.51	64	6080	622	99	21.96	0.4	8.093	0	0	0	0	1292	L
L FSE1487	CO30406	A	20 N FUSE	13.76Y	114.6	0.00	11.37	0.06	0	1	0	100	0.00	0.0	8.093	0	0	0	0	1	L
L CO27485	FSE1487	A	4ACSR	13.76Y	114.6	0.00	11.37	0.06	0	1	0	100	0.00	0.0	8.244	0	0	0	1	1	L
L CO27511	CO30406	ABC	1/0ACSR	13.72Y	114.4	0.27	11.64	147.49	64	6057	601	100	13.17	0.2	8.320	0	0	0	0	1291	L
L CO27512	CO27511	ABC	1/0ACSR	13.71Y	114.3	0.10	11.74	147.49	64	6044	588	100	5.02	0.1	8.407	0	0	0	1	1291	L
L CO27513	CO27512	ABC	1/0ACSR	13.63Y	113.5	0.72	12.46	147.49	64	6039	583	100	35.04	0.6	9.012	0	0	0	0	1290	L
L CO29734	CO29662	C	#2 ACSR 7/	13.89Y	115.8	0.00	10.25	60.77	34	839	96	99	0.01	0.0	7.154	0	0	0	0	186	L
L CO29735	CO29734	C	#2 ACSR 7/	13.88Y	115.7	0.08	10.33	60.77	34	839	96	99	0.55	0.1	7.245	0	0	0	0	186	L
L CO29699	CO29735	C	#2 ACSR 7/	13.87Y	115.6	0.06	10.39	60.77	34	838	96	99	0.41	0.0	7.313	0	0	0	1	186	L
L CO29700	CO29699	C	#2 ACSR 7/	13.87Y	115.5	0.07	10.46	60.77	34	838	96	99	0.45	0.1	7.386	0	0	0	0	185	L
L CO209951374	CO29700	C	2ACSR	13.87Y	115.5	0.00	10.46	0.00	0	0	0	100	0.00	0.0	7.425	0	0	0	0	1	L
L CO1175732622	CO209951374	C	2ACSR	13.87Y	115.5	0.00	10.46	0.00	0	0	0	100	0.00	0.0	7.488	0	0	0	1	1	L
L CO-573561432	CO29700	C	#2 ACSR 7/	13.85Y	115.4	0.11	10.57														

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

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		Units Displayed In Volts																				
		-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru		
L CO29847	CO29916	C	#2 ACSR 7/	13.77Y	114.8	0.13	11.21	58.16	32	797	88	99	0.87	0.1	8.246	0	0	0	0	173	L	
L CO29922	CO29847	C	#2 ACSR 7/	13.76Y	114.7	0.10	11.31	57.25	32	784	86	99	0.62	0.1	8.360	0	0	0	0	1	173	L
L CO29921	CO29922	C	#2 ACSR 7/	13.76Y	114.7	0.02	11.34	57.25	32	783	86	99	0.16	0.0	8.389	0	0	0	0	0	172	L
L CO-1841241144	CO29921	C	#2 ACSR 7/	13.76Y	114.6	0.03	11.37	57.25	32	783	86	99	0.22	0.0	8.430	0	0	0	0	1	172	L
L CO880786530	CO-1841241144	C	#2 ACSR 7/	13.75Y	114.6	0.04	11.41	57.24	32	783	85	99	0.25	0.0	8.477	0	0	0	0	0	170	L
L CO29848	CO880786530	C	#2 ACSR 7/	13.75Y	114.6	0.03	11.44	57.24	32	782	85	99	0.20	0.0	8.514	0	0	0	0	0	170	L
L OH190333001	CO29848	C	#2 ACSR 7/	13.74Y	114.5	0.09	11.54	57.24	32	782	85	99	0.59	0.1	8.624	0	0	0	0	0	169	L
L CO29923	OH190333001	C	#2 ACSR 7/	13.73Y	114.4	0.05	11.58	57.24	32	782	85	99	0.30	0.0	8.680	0	0	0	0	3	168	L
L CO29924	CO29923	C	#2 ACSR 7/	13.73Y	114.4	0.02	11.60	57.15	32	780	84	99	0.12	0.0	8.703	0	0	0	0	1	165	L
L OH190333002	CO29924	C	#2 ACSR 7/	13.72Y	114.4	0.04	11.65	56.75	32	775	84	99	0.28	0.0	8.755	0	0	0	0	0	164	L
L OH190333003	OH190333002	C	#2 ACSR 7/	13.72Y	114.3	0.04	11.69	56.75	32	774	83	99	0.28	0.0	8.807	0	0	0	0	0	164	L
L OH190333004	OH190333003	C	#2 ACSR 7/	13.71Y	114.3	0.02	11.71	56.68	31	773	83	99	0.15	0.0	8.835	0	0	0	0	0	164	L
L CO29925	OH190333004	C	#2 ACSR 7/	13.70Y	114.2	0.12	11.84	56.68	31	773	83	99	0.77	0.1	8.981	0	0	0	0	0	164	L
L CO29926	CO29925	C	#2 ACSR 7/	13.69Y	114.1	0.08	11.91	56.28	31	767	82	99	0.47	0.1	9.071	0	0	0	0	0	161	L
L CO29927	CO29926	C	#2 ACSR 7/	13.67Y	114.0	0.13	12.05	56.28	31	766	81	99	0.84	0.1	9.232	0	0	0	0	1	160	L
L CO29928	CO29927	C	2ACSR	13.67Y	114.0	0.00	12.05	0.32	0	4	0	100	0.00	0.0	9.315	0	0	0	0	1	1	L
L CO-678092211	CO29927	C	#2 ACSR 7/	13.67Y	113.9	0.02	12.06	55.93	31	761	80	99	0.11	0.0	9.254	0	0	0	0	0	158	L
L CO941360509	CO-678092211	C	#2 ACSR 7/	13.67Y	113.9	0.05	12.11	55.93	31	760	80	99	0.31	0.0	9.314	0	0	0	0	0	158	L
L CO757642856	CO941360509	C	#2 ACSR 7/	13.65Y	113.8	0.11	12.22	55.93	31	760	80	99	0.66	0.1	9.442	0	0	0	0	0	158	L
L CO1744806168	CO757642856	C	#2 ACSR 7/	13.65Y	113.7	0.03	12.25	55.93	31	759	79	99	0.21	0.0	9.482	0	0	0	0	0	158	L
L CO29895	CO1744806168	C	#2 ACSR 7/	13.64Y	113.7	0.08	12.33	55.93	31	759	79	99	0.51	0.1	9.580	0	0	0	0	0	158	L
L CO29932	CO29895	C	2ACSR	13.64Y	113.7	0.00	12.33	0.63	0	9	1	99	0.00	0.0	9.632	0	0	0	0	0	1	L
L CO29933	CO29895	C	#2 ACSR 7/	13.63Y	113.6	0.05	12.39	53.92	30	732	76	99	0.32	0.0	9.647	0	0	0	0	0	155	L
L CO29934	CO29933	C	#2 ACSR 7/	13.63Y	113.6	0.04	12.43	52.91	29	717	74	99	0.25	0.0	9.700	0	0	0	0	0	153	L
L CO-1500217612	CO29934	C	#2 ACSR 7/	13.62Y	113.5	0.05	12.48	52.06	29	706	73	99	0.28	0.0	9.763	0	0	0	0	0	152	L
L CO100721757	CO-1500217612	C	#2 ACSR 7/	13.61Y	113.4	0.12	12.60	52.06	29	705	73	99	0.71	0.1	9.922	0	0	0	0	0	152	L
L OH190333005	CO100721757	C	#2 ACSR 7/	13.60Y	113.4	0.04	12.64	52.06	29	705	72	99	0.21	0.0	9.969	0	0	0	0	0	152	L
L CO29941	OH190333005	C	#2 ACSR 7/	13.60Y	113.3	0.04	12.68	50.88	28	689	70	99	0.24	0.0	10.026	0	0	0	0	0	149	L
L CO29939	CO29941	C	#2 ACSR 7/	13.59Y	113.2	0.08	12.76	49.00	27	663	68	99	0.45	0.1	10.141	0	0	0	0	0	143	L
L CO29859	CO29939	C	#2 ACSR 7/	13.59Y	113.2	0.02	12.79	47.09	26	637	65	99	0.13	0.0	10.176	0	0	0	0	0	140	L
L CO29857	CO29859	C	#2 ACSR 7/	13.57Y	113.1	0.15	12.94	42.51	24	575	58	99	0.73	0.1	10.423	0	0	0	0	0	111	L
L CO29858	CO29857	C	#2 ACSR 7/	13.56Y	113.0	0.05	12.99	42.31	24	571	57	100	0.23	0.0	10.502	0	0	0	0	4	110	L
L OH190324001	CO29858	C	#2 ACSR 7/	13.56Y	113.0	0.03	13.02	41.13	23	555	55	100	0.15	0.0	10.555	0	0	0	0	0	106	L
L CO29879	OH190324001	C	6ACWC	13.56Y	113.0	0.00	13.02	0.20	0	3	0	100	0.00	0.0	10.688	0	0	0	0	2	2	L
L CO29880	OH190324001	C	6ACWC	13.56Y	113.0	0.00	13.03	0.98	1	13	1	100	0.00	0.0	10.652	0	0	0	0	3	3	L
L CO29943	OH190324001	C	6ACWC	13.56Y	113.0	0.00	13.02	0.30	0	4	0	100	0.00	0.0	10.593	0	0	0	0	0	1	L
L CO29944	CO29943	C	6ACWC	13.56Y	113.0	0.00	13.02	0.29	0	4	0	100	0.00	0.0	10.610	0	0	0	0	0	3	L
L CO29945	CO29944	C	6ACWC	13.56Y	113.0	0.00	13.02	0.29	0	4	0	100	0.00	0.0	10.665	0	0	0	0	0	1	L
L CO29946	CO29945	C	2ACSR	13.56Y	113.0	0.00	13.02	0.29	0	4	0	100	0.00	0.0	10.736	0	0	0	0	0	2	L
L CO952250913	CO29946	C	2ACSR	13.56Y	113.0	0.00	13.02	0.00	0	0	0	100	0.00	0.0	10.824	0	0	0	0	0	1	L
L CO-1837537402	CO29946	C	2ACSR	13.56Y	113.0	0.00	13.02	0.29	0	4	0	100	0.00	0.0	10.841	0	0	0	0	0	1	L
L CO29947	CO-1837537402	C	6ACWC	13.56Y	113.0	0.00	13.03	0.29	0	4	0	100	0.00	0.0	10.967	0	0	0	0	0	1	L
L CO29956	OH190324001	C	#2 ACSR 7/	13.55Y	112.9	0.04	13.06	39.23	22	529	53	100	0.17	0.0	10.621	0	0	0	0	2	97	L
L CO29957	CO29956	C	#2 ACSR 7/	13.54Y	112.9	0.07	13.13	38.17	21	515	51	100	0.30	0.1	10.748	0	0	0	0	0	3	L
L CO29958	CO29957	C	#2 ACSR 7/	13.53Y	112.8	0.09	13.23	37.66	21	508	50	100	0.39	0.1	10.915	0	0	0	0	0	92	L
L CO29881	CO29958	C	6ACWC	13.53Y	112.8	0.00	13.23	0.58	0	8	1	99	0.00	0.0	10.977	0	0	0	0	0	1	L
L CO29882	CO29958	C	6ACWC	13.53Y	112.8	0.00	13.23	0.00	0	0	0	100	0.00	0.0	10.971	0	0	0	0	0	1	L
L CO29860	CO29958	C	#2 ACSR 7/	13.53Y	112.7	0.03	13.26	37.08	21	499	49	100	0.13	0.0	10.972	0	0	0	0	0	1	L
L CO29861	CO29860	C	#2 ACSR 7/	13.53Y	112.7	0.03	13.29	36.28	20	489	48	100	0.13	0.0	11.032	0	0	0	0	0	87	L
L CO29889	CO29861	C	4ACSR	13.53Y	112.7	0.00	13.29	1.00	1	13	1	100	0.00	0.0	11.093	0	0	0	0	0	1	L
L CO29865	CO29861	C	#2 ACSR 7/	13.52Y	112.7	0.06	13.35	35.28	20	475	46	100	0.23	0.0	11.142	0	0	0	0	0	86	L
L CO29884	CO29865	C	6ACWC	13.52Y	112.6	0.00	13.35	2.05	1	28	3	99	0.00	0.0	11.223	0	0	0	0	2	3	L
L CO1984516392	CO29884	C	2ACSR	13.52Y	112.6	0.00	13.35	0.91	1	12	1	100	0.00	0.0	11.264	0	0	0	0	0	1	L
L CO29885	CO29885	C	6ACWC	13.52Y	112.7	0.00	13.35	0.68	0	9	1	99	0.00	0.0	11.294	0	0	0	0	0	1	L
L CO29862	CO29865	C	#2 ACSR 7/	13.51Y	112.6	0.04	13.38	32.55	18	438	43	100	0.14	0.0	11.221	0	0	0	0	0	1	L
L CO29959	CO29862	C	6ACWC	13.51Y	112.6	0.00	13.39	1.67	1	22	2	100	0.00	0.0	11.276	0	0	0	0	0	1	L
L CO29960	CO29959	C	6ACWC	13.51Y	112.6	0.00	13.39	1.52	1	20	2	100	0.00	0.0	11.305	0	0	0	0	0	1	L
L CO29961	CO29960	C	6ACWC	13.51Y	112.6	0.00	13.39	1.52	1	20	2	100	0.00	0.0	11.350	0	0	0	0	0	1	L
L CO29962	CO29961	C	6ACWC	13.51Y	112.6	0.00	13.39	1.00	1	13	1	100	0.00	0.0	11.543	0	0	0	0	0	2	L
L CO29963	CO29962	C	6ACWC	13.51Y	112.6	0.00	13.40	1.00	1	13	1	100	0.00	0.0	11.666	0	0	0	0	0	1	L
L CO29964	CO29963	C	6ACWC	13.51Y	112.6	0.00	13.40	0.00	0	0	0	100	0.00	0.0	11.856	0	0	0	0	0	1	L
L CO29965	CO29964	C	6ACWC	13.51Y	112.6	0.00	13.40	0.00	0	0	0	100	0.00	0.0								

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru	
L CO30016	CO30011	C	4ACSR	13.46Y	112.2	0.00	13.85	0.00	0	0	0	100	0.00	0.0	12.703	0	0	0	1	1 L
L CO29994	CO30048	C	#2 ACSR 7/	13.45Y	112.1	0.05	13.89	20.64	11	277	25	100	0.11	0.0	12.704	0	0	0	1	51 L
L CO29993	CO29994	C	#2 ACSR 7/	13.45Y	112.1	0.02	13.92	19.29	11	258	23	100	0.05	0.0	12.780	0	0	0	0	49 L
L CO30049	CO29993	C	6ACWC	13.45Y	112.1	0.00	13.92	0.00	0	0	0	100	0.00	0.0	12.800	0	0	0	1	2 L
L CO30050	CO30049	C	6ACWC	13.45Y	112.1	0.00	13.92	0.00	0	0	0	100	0.00	0.0	12.874	0	0	0	1	1 L
L CO29992	CO29993	C	#2 ACSR 7/	13.44Y	112.0	0.05	13.96	19.29	11	258	23	100	0.10	0.0	12.950	0	0	0	0	47 L
L CO29991	CO29992	C	#2 ACSR 7/	13.44Y	112.0	0.07	14.03	19.29	11	258	23	100	0.14	0.1	13.180	0	0	0	1	47 L
L CO30012	CO29991	C	6ACWC	13.44Y	112.0	0.00	14.03	0.22	0	3	0	100	0.00	0.0	13.313	0	0	0	1	1 L
L CO29995	CO29991	C	#2 ACSR 7/	13.43Y	111.9	0.06	14.09	19.07	11	255	23	100	0.12	0.0	13.389	0	0	0	0	45 L
L CO30014	CO29995	C	6ACWC	13.43Y	111.9	0.00	14.09	0.38	0	5	1	98	0.00	0.0	13.426	0	0	0	1	1 L
L CO30090	CO29995	C	#2 ACSR 7/	13.42Y	111.9	0.05	14.14	18.69	10	250	22	100	0.11	0.0	13.578	0	0	0	1	44 L
L OH190103001	CO30090	C	#2 ACSR 7/	13.42Y	111.9	0.01	14.15	10.91	6	146	11	100	0.01	0.0	13.627	0	0	0	0	29 L
L OH190103002	OH190103001	C	#2 ACSR 7/	13.42Y	111.8	0.02	14.16	10.91	6	146	11	100	0.02	0.0	13.740	0	0	0	0	29 L
L OH190103003	OH190103002	C	#2 ACSR 7/	13.42Y	111.8	0.03	14.19	10.91	6	146	11	100	0.03	0.0	13.908	0	0	0	0	29 L
L OH190113001.1	OH190103003	C	#2 ACSR 7/	13.42Y	111.8	0.01	14.20	10.91	6	146	11	100	0.02	0.0	13.992	0	0	0	0	29 L
L OH190113001	OH190113001.1	C	#2 ACSR 7/	13.41Y	111.8	0.01	14.22	10.91	6	146	11	100	0.02	0.0	14.074	0	0	0	0	29 L
L OH190113003	OH190113001	C	6ACWC	13.41Y	111.8	0.00	14.22	3.44	2	46	5	99	0.00	0.0	14.074	0	0	0	0	8 L
L OH190113004	OH190113003	C	6ACWC	13.41Y	111.8	0.00	14.22	3.15	2	42	4	100	0.00	0.0	14.135	0	0	0	0	8 L
L CO30089	OH190113004	C	6ACWC	13.41Y	111.8	0.02	14.24	3.15	2	42	4	100	0.01	0.0	14.377	0	0	0	0	8 L
L CO30059	CO30089	C	6ACWC	13.41Y	111.8	0.00	14.24	3.15	2	42	4	100	0.00	0.0	14.387	0	0	0	4	8 L
L CO30060	CO30059	C	6ACWC	13.41Y	111.7	0.01	14.25	2.29	2	31	3	100	0.00	0.0	14.668	0	0	0	1	3 L
L CO30061	CO30060	C	6ACWC	13.41Y	111.7	0.00	14.25	0.65	0	9	1	99	0.00	0.0	14.724	0	0	0	0	1 L
L CO30062	CO30061	C	6ACWC	13.41Y	111.7	0.00	14.25	0.65	0	9	1	99	0.00	0.0	14.745	0	0	0	0	1 L
L CO30063	CO30062	C	6ACWC	13.41Y	111.7	0.00	14.25	0.65	0	9	1	99	0.00	0.0	14.815	0	0	0	1	1 L
L CO30013	CO30060	C	6ACWC	13.41Y	111.7	0.00	14.25	0.73	1	10	1	100	0.00	0.0	14.705	0	0	0	1	1 L
L CO1319105047	CO30060	C	2ACSR	13.41Y	111.7	0.00	14.25	0.00	0	0	0	100	0.00	0.0	14.718	0	0	0	0	0 L
L CO-1534322255	CO30059	C	2ACSR	13.41Y	111.8	0.00	14.24	0.85	0	11	1	100	0.00	0.0	14.443	0	0	0	1	1 L
L CO29985	OH190113001	C	#2 ACSR 7/	13.41Y	111.8	0.03	14.25	7.47	4	100	7	100	0.03	0.0	14.349	0	0	0	1	21 L
L CO29997	CO29985	C	6ACWC	13.41Y	111.8	0.00	14.25	0.18	0	2	0	100	0.00	0.0	14.425	0	0	0	1	1 L
L CO30064	CO29985	C	#2 ACSR 7/	13.41Y	111.7	0.00	14.25	7.23	4	97	6	100	0.00	0.0	14.382	0	0	0	1	19 L
L CO30065	CO30064	C	#2 ACSR 7/	13.41Y	111.7	0.01	14.26	6.88	4	92	6	100	0.00	0.0	14.435	0	0	0	2	18 L
L CO30066	CO30065	C	#2 ACSR 7/	13.41Y	111.7	0.03	14.29	6.07	3	81	5	100	0.02	0.0	14.781	0	0	0	2	16 L
L CO30067	CO30066	C	#2 ACSR 7/	13.40Y	111.7	0.01	14.29	4.65	3	62	3	100	0.00	0.0	14.881	0	0	0	0	14 L
L CO30068	CO30067	C	#2 ACSR 7/	13.40Y	111.7	0.01	14.30	4.65	3	62	3	100	0.00	0.0	14.960	0	0	0	2	13 L
L CO30069	CO30068	C	#2 ACSR 7/	13.40Y	111.7	0.01	14.30	4.61	3	62	3	100	0.00	0.0	15.067	0	0	0	0	11 L
L CO30070	CO30069	C	4ACSR	13.40Y	111.7	0.00	14.30	0.01	0	0	0	100	0.00	0.0	15.125	0	0	0	0	1 L
L CO30071	CO30070	C	4ACSR	13.40Y	111.7	0.00	14.30	0.01	0	0	0	100	0.00	0.0	15.243	0	0	0	1	1 L
L CO30072	CO30069	C	#2 ACSR 7/	13.40Y	111.7	0.00	14.31	4.60	3	62	3	100	0.00	0.0	15.108	0	0	0	0	10 L
L CO30073	CO30072	C	#2 ACSR 7/	13.40Y	111.7	0.00	14.31	4.60	3	62	3	100	0.00	0.0	15.164	0	0	0	0	10 L
L CO29999	CO30073	C	6ACWC	13.40Y	111.7	0.00	14.31	1.12	1	15	2	99	0.00	0.0	15.296	0	0	0	1	3 L
L CO619176814	CO29999	C	2ACSR	13.40Y	111.7	0.00	14.32	0.58	0	8	1	99	0.00	0.0	15.450	0	0	0	2	2 L
L CO30000	CO30073	C	6ACWC	13.40Y	111.7	0.00	14.31	0.71	1	9	1	99	0.00	0.0	15.202	0	0	0	2	2 L
L CO30484	CO30073	C	#2 ACSR 7/	13.40Y	111.7	0.01	14.32	2.78	2	37	0	100	0.00	0.0	15.372	0	0	0	0	5 L
L CO29897	CO30484	C	2ACSR	13.40Y	111.7	0.00	14.32	1.33	1	18	-2	-99	0.00	0.0	15.402	0	0	0	0	1 L
L CO29915	CO29897	C	1/OPRIURD	13.40Y	111.7	0.00	14.32	1.33	1	18	-2	-99	0.00	0.0	15.621	0	0	0	1	1 L
L CO29913	CO30484	C	6ACWC	13.40Y	111.7	0.00	14.32	1.45	1	19	2	99	0.00	0.0	15.467	0	0	0	3	4 L
L CO29914	CO29913	C	6ACWC	13.40Y	111.7	0.00	14.32	0.08	0	1	0	100	0.00	0.0	15.523	0	0	0	1	1 L
L CO29998	CO30067	C	6ACWC	13.40Y	111.7	0.00	14.29	0.00	0	0	0	100	0.00	0.0	15.051	0	0	0	1	1 L
L CO30051	CO30090	C	#2 ACSR 7/	13.42Y	111.9	0.01	14.15	7.77	4	104	11	99	0.01	0.0	13.654	0	0	0	0	14 L
L CO30052	CO30051	C	6ACWC	13.42Y	111.8	0.02	14.17	7.34	5	98	10	99	0.02	0.0	13.773	0	0	0	1	11 L
L CO30053	CO30052	C	6ACWC	13.42Y	111.8	0.00	14.17	5.53	4	74	7	100	0.00	0.0	13.792	0	0	0	1	9 L
L CO30054	CO30053	C	6ACWC	13.42Y	111.8	0.01	14.17	4.99	4	67	7	99	0.00	0.0	13.848	0	0	0	0	8 L
L CO245257777	CO30054	C	2ACSR	13.42Y	111.8	0.00	14.18	0.85	0	11	1	100	0.00	0.0	13.878	0	0	0	1	1 L
L CO-953954889	CO30054	C	2ACSR	13.42Y	111.8	0.00	14.18	0.49	0	7	1	99	0.00	0.0	13.924	0	0	0	1	1 L
L CO30055	CO30054	C	6ACWC	13.42Y	111.8	0.00	14.18	0.99	1	13	1	100	0.00	0.0	13.896	0	0	0	1	1 L
L CO30018	CO30054	C	2ACSR	13.42Y	111.8	0.00	14.18	2.65	1	35	4	99	0.00	0.0	13.892	0	0	0	1	5 L
L CO758365666	CO30018	C	2ACSR	13.42Y	111.8	0.00	14.18	1.84	1	25	2	100	0.00	0.0	13.900	0	0	0	2	4 L
L CO1698527219	CO758365666	C	2ACSR	13.42Y	111.8	0.00	14.18	0.31	0	4	0	100	0.00	0.0	13.951	0	0	0	2	2 L
L CO29996	CO30052	C	6ACWC	13.42Y	111.8	0.00	14.17	0.79	1	11	1	100	0.00	0.0	13.839	0	0	0	1	1 L
L CO30056	CO30051	C	#2 ACSR 7/	13.42Y	111.9	0.00	14.15	0.43	0	6	1	99	0.00	0.0	13.808	0	0	0	1	3 L
L CO30057	CO30056	C	#2 ACSR 7/	13.42Y	111.9	0.00	14.15	0.43	0	6	1	99	0.00	0.0	13.976	0	0	0	2	2 L
L CO30010	CO29994	C	6ACWC	13.45Y	112.1	0.00	13.90	0.71	1	10	1	100	0.00	0.0	12.770	0	0	0	1	1 L
L CO29863	CO29971	C	6ACWC	13.50Y	112.5	0.01	13.50	1.69	1	23	2	100	0.00	0.0	11.729	0	0	0	0	4 L
L CO29948	CO29863	C	4ACSR	13.50Y	112.5	0.00	13.50	0.44	0	6	1	99	0.00	0.0	11.852	0	0	0	1	3 L
L CO29949	CO29948	C	4ACSR	13.50Y	112.5	0.00	13.50	0.10	0	1	0	100	0.00	0.0	11.869	0	0	0	0	2 L
L CO29950	CO29949	C	4ACSR	13.50Y	112.5	0.00	13.50	0.10	0	1	0	100	0.00	0.0	11.913	0	0	0	2	2 L
L CO29890	CO29863	C	6ACWC	13.50Y	112.5	0.00	13.50	1.25	1	17	2	99								

Balanced Voltage Drop Report
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Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru	
L	CO29855		CO29953	C	6ACWC	13.58Y 113.2	0.01	12.84	3.60	3	49	5	99	0.00	0.0	10.754	0	0	0	20	L
L	CO29954		CO29855	C	6ACWC	13.58Y 113.2	0.00	12.84	0.14	0	2	0	100	0.00	0.0	10.811	0	0	0	4	L
L	CO29955		CO29954	C	6ACWC	13.58Y 113.2	0.00	12.84	0.14	0	2	0	100	0.00	0.0	10.868	0	0	0	2	L
L	CO29854		CO29855	C	6ACWC	13.58Y 113.1	0.02	12.85	3.46	2	47	5	99	0.01	0.0	10.972	0	0	0	16	L
L	CO29978		CO29854	C	6ACWC	13.58Y 113.1	0.00	12.86	0.44	0	6	1	99	0.00	0.0	11.094	0	0	0	1	L
L	CO29979		CO29978	C	6ACWC	13.58Y 113.1	0.00	12.86	0.44	0	6	1	99	0.00	0.0	11.121	0	0	0	1	L
L	CO29980		CO29979	C	6ACWC	13.58Y 113.1	0.00	12.86	0.44	0	6	1	99	0.00	0.0	11.162	0	0	0	3	L
L	CO29981		CO29854	C	6ACWC	13.58Y 113.1	0.01	12.86	3.02	2	41	4	100	0.00	0.0	11.067	0	0	0	11	L
L	CO29982		CO29981	C	6ACWC	13.58Y 113.1	0.01	12.87	3.02	2	41	4	100	0.00	0.0	11.237	0	0	0	11	L
L	CO29853		CO29982	C	6ACWC	13.57Y 113.1	0.01	12.88	3.02	2	41	4	100	0.00	0.0	11.332	0	0	0	11	L
L	CO29875		CO29853	C	6ACWC	13.57Y 113.1	0.00	12.88	0.08	0	1	0	100	0.00	0.0	11.378	0	0	0	3	L
L	CO29852		CO29853	C	6ACWC	13.57Y 113.1	0.01	12.89	2.94	2	40	4	100	0.00	0.0	11.465	0	0	0	1	L
L	CO29874		CO29852	C	6ACWC	13.57Y 113.1	0.00	12.89	0.00	0	0	0	100	0.00	0.0	11.543	0	0	0	0	L
L	CO29976		CO29852	C	6ACWC	13.57Y 113.1	0.00	12.89	2.00	1	27	3	99	0.00	0.0	11.579	0	0	0	3	L
L	CO29977		CO29976	C	6ACWC	13.57Y 113.1	0.00	12.89	0.69	0	9	1	99	0.00	0.0	11.644	0	0	0	2	L
L	CO29892		CO29977	C	2ACSR	13.57Y 113.1	0.00	12.89	0.69	0	9	1	99	0.00	0.0	11.699	0	0	0	2	L
L	CO29891		CO29952	C	2ACSR	13.58Y 113.2	0.00	12.82	0.81	0	11	1	100	0.00	0.0	10.587	0	0	0	1	L
L	CO29866		CO29983	C	6ACWC	13.58Y 113.2	0.00	12.81	0.01	0	0	0	100	0.00	0.0	10.661	0	0	0	0	L
L	CO29929		CO29866	C	6ACWC	13.58Y 113.2	0.00	12.81	0.01	0	0	0	100	0.00	0.0	10.706	0	0	0	1	L
L	CO29930		CO29929	C	6ACWC	13.58Y 113.2	0.00	12.81	0.01	0	0	0	100	0.00	0.0	10.791	0	0	0	1	L
L	CO29877		CO29939	C	6ACWC	13.59Y 113.2	0.00	12.76	1.64	1	22	2	100	0.00	0.0	10.212	0	0	0	2	L
L	CO-1301166740		CO29939	C	2ACSR	13.59Y 113.2	0.00	12.76	0.27	0	4	0	100	0.00	0.0	10.178	0	0	0	1	L
L	CO29940		CO29941	C	6ACWC	13.60Y 113.3	0.00	12.68	1.23	1	17	2	99	0.00	0.0	10.065	0	0	0	2	L
L	CO29974		CO29941	C	6ACWC	13.60Y 113.3	0.00	12.68	0.65	0	9	1	99	0.00	0.0	10.073	0	0	0	2	L
L	CO29975		CO29974	C	6ACWC	13.60Y 113.3	0.00	12.68	0.39	0	5	1	98	0.00	0.0	10.140	0	0	0	2	L
L	CO29896		OH190333005	C	2ACSR	13.60Y 113.4	0.00	12.64	0.00	0	0	0	100	0.00	0.0	10.044	0	0	0	3	L
L	CO29935		CO29933	C	2ACSR	13.63Y 113.6	0.00	12.39	1.02	1	14	1	100	0.00	0.0	9.722	0	0	0	0	L
L	CO29936		CO29935	C	2ACSR	13.63Y 113.6	0.00	12.39	1.02	1	14	1	100	0.00	0.0	9.794	0	0	0	1	L
L	CO29937		CO29936	C	2ACSR	13.63Y 113.6	0.00	12.39	0.29	0	4	0	100	0.00	0.0	9.838	0	0	0	1	L
L	CO29871		CO29895	C	2ACSR	13.64Y 113.7	0.00	12.33	0.42	0	6	1	99	0.00	0.0	9.609	0	0	0	1	L
L	CO29868		CO29925	C	2ACSR	13.70Y 114.2	0.00	11.84	0.00	0	0	0	100	0.00	0.0	9.064	0	0	0	2	L
L	CO29869		OH190333001	C	2ACSR	13.74Y 114.5	0.00	11.54	0.00	0	0	0	100	0.00	0.0	8.780	0	0	0	1	L
L	CO29870		CO-1841241144	C	2ACSR	13.76Y 114.6	0.00	11.37	0.01	0	0	0	100	0.00	0.0	8.477	0	0	0	1	L
L	CO-1031542311		CO29916	C	2ACSR	13.79Y 114.9	0.00	11.08	0.10	0	1	0	100	0.00	0.0	8.119	0	0	0	0	L

----- Feeder No. 0 (Weaver Rd) Beginning with Device OC914 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	14059	192	0	0	0	0	1027	0.00	15278	Lowest Voltage = 111.68 on Element CO29915		
KVAR	1290	16	-321	-37	0	0	1174		2121	Max Accm VoltD = 14.32 on Element CO29915		
										Max Elem VoltD = 12.46 on Element RG240439001		

Balanced Voltage Drop Report
Source: PEASTICKS

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

		Units Displayed In Volts																		
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	KVAR	Cons On	Cons Thru
PEASTICKS		ABC	PEASTICKS	15.12Y	126.0	0.00	0.00	330.29	0	14860	1911	99	0.00	0.0	0.000	0	0	0	0	2931
----- Feeder No. 0 (Hart Pike) Beginning with Device OC237 -----																				
----- Feeder No. 0 (Fordge Mill) Beginning with Device OC234 -----																				
----- Feeder No. 0 (Owingsville/Sharpsburg) Beginning with Device REC824 -----																				
P UD430208001	CO8732	B	1/OPRIURD	7.42Y	123.6	0.00	2.37	-0.01	0	0	0	100	0.00	0.0	11.446	0	0	0	0	0 P
----- Feeder No. 0 (Moores Ferry) Beginning with Device REC823 -----																				
L CO1276	CO1401	B	4ACSR	7.01Y	116.8	0.18	9.16	40.18	29	281	28	100	0.42	0.1	6.931	0	0	0	0	47 L
L CO1402	CO1276	B	4ACSR	7.00Y	116.7	0.10	9.26	22.42	16	156	16	99	0.13	0.1	7.031	0	0	0	2	29 L
L CO1403	CO1402	B	4ACSR	7.00Y	116.7	0.06	9.32	22.42	16	156	16	99	0.08	0.1	7.096	0	0	0	0	27 L
L CO1404	CO1403	B	4ACSR	7.00Y	116.7	0.01	9.33	3.37	2	23	2	100	0.00	0.0	7.172	0	0	0	1	2 L
L CO1405	CO1404	B	4ACSR	7.00Y	116.7	0.00	9.34	1.52	1	11	1	100	0.00	0.0	7.219	0	0	0	1	1 L
L CO1406	CO1403	B	4ACSR	7.00Y	116.6	0.05	9.37	19.05	14	133	13	100	0.06	0.0	7.158	0	0	0	2	25 L
L CO1407	CO1406	B	4ACSR	6.99Y	116.5	0.08	9.46	18.60	13	129	13	99	0.09	0.1	7.260	0	0	0	1	23 L
L CO1408	CO1407	B	2ACSR	6.99Y	116.5	0.03	9.48	18.60	10	129	13	99	0.03	0.0	7.308	0	0	0	0	22 L
L CO-1538821634	CO1408	B	2ACSR	6.99Y	116.5	0.06	9.54	18.24	10	127	13	99	0.06	0.0	7.413	0	0	0	0	22 L
L CO1414	CO-1538821634	B	4ACSR	6.99Y	116.4	0.01	9.55	14.97	11	104	10	100	0.01	0.0	7.432	0	0	0	0	16 L
L CO1415	CO1414	B	4ACSR	6.98Y	116.4	0.06	9.61	14.97	11	104	10	100	0.05	0.1	7.528	0	0	0	1	16 L
L CO1416	CO1415	B	4ACSR	6.98Y	116.3	0.05	9.66	14.65	10	102	10	100	0.04	0.0	7.603	0	0	0	2	15 L
L CO1417	CO1416	B	4ACSR	6.98Y	116.3	0.00	9.66	0.64	0	4	0	100	0.00	0.0	7.659	0	0	0	1	1 L
L CO1418	CO1416	B	4ACSR	6.98Y	116.3	0.02	9.68	14.01	10	97	10	99	0.02	0.0	7.640	0	0	0	0	12 L
L CO1419	CO1418	B	4ACSR	6.98Y	116.3	0.00	9.69	0.67	0	5	0	100	0.00	0.0	7.697	0	0	0	2	2 L
L CO1420	CO1418	B	4ACSR	6.98Y	116.3	0.03	9.71	13.35	10	93	9	100	0.02	0.0	7.692	0	0	0	1	10 L
L CO1421	CO1420	B	4ACSR	6.98Y	116.3	0.02	9.74	11.49	8	80	8	100	0.02	0.0	7.739	0	0	0	0	9 L
L CO1422	CO1421	B	4ACSR	6.97Y	116.2	0.04	9.77	11.49	8	80	8	100	0.02	0.0	7.810	0	0	0	2	9 L
L CO1423	CO1422	B	4ACSR	6.97Y	116.2	0.02	9.79	8.22	6	57	6	99	0.01	0.0	7.857	0	0	0	1	7 L
L CO1424	CO1423	B	4ACSR	6.97Y	116.2	0.01	9.80	7.14	5	50	5	100	0.00	0.0	7.897	0	0	0	3	6 L
L OH390762001	CO1424	B	4ACSR	6.97Y	116.2	0.00	9.80	0.00	0	0	0	100	0.00	0.0	7.944	0	0	0	0	0 L
L CO1425	CO1424	B	4ACSR	6.97Y	116.2	0.01	9.81	3.69	3	26	3	99	0.00	0.0	7.968	0	0	0	1	3 L
L CO1512	CO1425	B	4ACSR	6.97Y	116.2	0.00	9.82	2.88	2	20	2	100	0.00	0.0	8.006	0	0	0	2	2 L
L CO1513	CO1512	B	4ACSR	6.97Y	116.2	0.00	9.82	0.00	0	0	0	100	0.00	0.0	8.011	0	0	0	0	0 L
L OH390762003	CO1512	B	2ACSR	6.97Y	116.2	0.00	9.82	0.00	0	0	0	100	0.00	0.0	8.076	0	0	0	0	0 L
L SW390762001	OH390762003	B	Open	6.97Y	116.2	0.00	9.82	0.00	0	0	0	100	0.00	0.0	8.076	0	0	0	0	0 L
L CO1409	CO-1538821634	B	4ACSR	6.99Y	116.5	0.01	9.55	1.77	1	12	1	100	0.00	0.0	7.525	0	0	0	0	4 L
L CO1314	CO1409	B	4ACSR	6.99Y	116.5	0.00	9.55	1.15	1	8	1	99	0.00	0.0	7.572	0	0	0	1	1 L
L CO1412	CO1409	B	4ACSR	6.99Y	116.5	0.00	9.55	0.62	0	4	0	100	0.00	0.0	7.541	0	0	0	1	3 L
L CO1413	CO1412	B	4ACSR	6.99Y	116.5	0.00	9.55	0.62	0	4	0	100	0.00	0.0	7.603	0	0	0	2	2 L
L CO1410	CO-1538821634	B	4ACSR	6.99Y	116.5	0.01	9.55	1.49	1	10	1	100	0.00	0.0	7.585	0	0	0	1	2 L
L CO1411	CO1410	B	4ACSR	6.99Y	116.5	0.00	9.55	0.00	0	0	0	100	0.00	0.0	7.678	0	0	0	1	1 L
L CO-1990088192	CO1408	B	2ACSR	6.99Y	116.5	0.00	9.48	0.36	0	2	0	100	0.00	0.0	7.347	0	0	0	0	0 L
L CO1277	CO1276	B	4ACSR	7.01Y	116.8	0.03	9.19	17.77	13	124	12	100	0.03	0.0	6.968	0	0	0	0	18 L
L CO1311	CO1277	B	4ACSR	7.01Y	116.8	0.01	9.20	1.85	1	13	1	100	0.00	0.0	7.082	0	0	0	2	2 L
L CO1312	CO1277	B	4ACSR	7.01Y	116.8	0.01	9.20	3.79	3	26	3	99	0.00	0.0	7.030	0	0	0	3	3 L
L CO1498	CO1277	B	4ACSR	7.01Y	116.8	0.03	9.22	12.12	9	85	8	100	0.02	0.0	7.025	0	0	0	1	13 L
L CO1499	CO1498	B	4ACSR	7.01Y	116.8	0.01	9.23	9.96	7	69	7	99	0.00	0.0	7.044	0	0	0	0	12 L
L CO1500	CO1499	B	4ACSR	7.01Y	116.8	0.02	9.25	8.44	6	59	6	99	0.01	0.0	7.096	0	0	0	2	10 L
L CO1501	CO1500	B	4ACSR	7.00Y	116.7	0.01	9.26	2.82	2	20	2	100	0.00	0.0	7.169	0	0	0	1	3 L
L CO1502	CO1501	B	4ACSR	7.00Y	116.7	0.00	9.26	2.82	2	20	2	100	0.00	0.0	7.195	0	0	0	1	2 L
L CO1503	CO1502	B	4ACSR	7.00Y	116.7	0.00	9.26	1.93	1	13	1	100	0.00	0.0	7.248	0	0	0	0	1 L
L CO1504	CO1503	B	4ACSR	7.00Y	116.7	0.00	9.27	1.93	1	13	1	100	0.00	0.0	7.295	0	0	0	1	1 L
L CO1505	CO1500	B	4ACSR	7.00Y	116.7	0.01	9.25	3.35	2	23	2	100	0.00	0.0	7.153	0	0	0	3	5 L
L CO1506	CO1505	B	4ACSR	7.00Y	116.7	0.00	9.26	0.79	1	5	1	98	0.00	0.0	7.200	0	0	0	0	2 L
L CO1507	CO1506	B	4ACSR	7.00Y	116.7	0.00	9.26	0.79	1	5	1	98	0.00	0.0	7.257	0	0	0	2	2 L
L CO1310	CO1499	B	4ACSR	7.01Y	116.8	0.00	9.23	1.53	1	11	1	100	0.00	0.0	7.107	0	0	0	2	2 L
L CO2039	CO2038	C	2ACSR	7.01Y	116.9	0.12	9.10	42.17	23	294	31	99	0.28	0.1	7.309	0	0	0	0	56 L
L CO2204	CO2039	C	4ACSR	7.01Y	116.9	0.00	9.10	1.13	1	8	1	99	0.00	0.0	7.385	0	0	0	0	2 L
L CO2203	CO2204	C	4ACSR	7.01Y	116.9	0.00	9.10	1.13	1	8	1	99	0.00	0.0	7.439	0	0	0	2	2 L
L CO2265	CO2039	C	2ACSR	7.01Y	116.9	0.05	9.15	39.84	22	278	29	99	0.11	0.0	7.352	0	0	0	1	53 L
L CO2266	CO2265	C	2ACSR	7.00Y	116.7	0.13	9.28	39.56	22	276	29	99	0.28	0.1	7.461	0	0	0	2	52 L
L CO2202	CO2266	C	4ACSR	7.00Y	116.7	0.01	9.28	2.74	2	19	2	99	0.00	0.0	7.518	0	0	0	1	3 L
L CO2201	CO2202	C	4ACSR	7.00Y	116.7	0.00	9.29	1.46	1	10	1	100	0.00	0.0	7.565	0	0	0	2	2 L
L CO2040	CO2266	C	2ACSR	7.00Y	116.6	0.08	9.35	35.81	20	249	26	99	0.15	0.1	7.532	0	0	0	3	47 L
L CO2267	CO2040	C	4ACSR	7.00Y	116.6	0.00	9.35	0.10	0	1	0	100	0.00	0.0	7.612	0	0	0	1	2 L
L CO2268	CO2267	C	4ACSR	7.00Y	116.6	0.00	9.35	0.00	0	0	0	100	0.00	0.0	7.636	0	0	0	1	1 L
L CO2041	CO2040	C	2ACSR	6.99Y	116.6	0.07	9.42	34.02	19	237	25	99	0.13	0.1	7.603	0	0			

Balanced Voltage Drop Report
Source: PEASTICKS

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013.WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru	
L CO2057	CO2045	C	6ACWC	6.95Y	115.8	0.01	10.23	2.85	2	20	2	100	0.00	0.0	8.579	0	0	0	0	3	L
L CO2194	CO2057	C	6ACWC	6.95Y	115.8	0.01	10.24	2.85	2	20	2	100	0.00	0.0	8.626	0	0	0	0	3	L
L CO2193	CO2194	C	6ACWC	6.95Y	115.8	0.00	10.24	2.85	2	20	2	100	0.00	0.0	8.664	0	0	0	1	3	L
L CO2192	CO2193	C	6ACWC	6.95Y	115.8	0.00	10.24	1.19	1	8	1	99	0.00	0.0	8.711	0	0	0	2	2	L
L CO2370	CO2057	C	6ACWC	6.95Y	115.8	0.00	10.23	0.00	0	0	0	100	0.00	0.0	8.585	0	0	0	0	0	L
L CO2196	CO2045	C	6ACWC	6.95Y	115.8	0.02	10.24	3.79	3	26	3	99	0.00	0.0	8.626	0	0	0	0	3	L
L CO2195	CO2196	C	6ACWC	6.95Y	115.8	0.00	10.24	0.00	0	0	0	100	0.00	0.0	8.702	0	0	0	1	1	L
L CO2198	CO2196	C	6ACWC	6.94Y	115.7	0.01	10.25	3.79	3	26	3	99	0.00	0.0	8.689	0	0	0	1	2	L
L CO2197	CO2198	C	6ACWC	6.94Y	115.7	0.00	10.25	1.89	1	13	1	100	0.00	0.0	8.735	0	0	0	1	1	L
L CO2134	CO2045	C	2ACSR	6.94Y	115.7	0.06	10.28	21.31	12	147	15	99	0.07	0.0	8.588	0	0	0	0	23	L
L CO2133	CO2134	C	2ACSR	6.94Y	115.7	0.03	10.31	21.31	12	147	15	99	0.04	0.0	8.640	0	0	0	3	23	L
L CO2132	CO2133	C	2ACSR	6.94Y	115.7	0.02	10.33	20.82	12	144	14	100	0.02	0.0	8.672	0	0	0	0	20	L
L CO2058	CO2132	C	2ACSR	6.94Y	115.6	0.02	10.35	18.52	10	128	13	99	0.02	0.0	8.712	0	0	0	1	16	L
L CO2073	CO2058	C	4ACSR	6.94Y	115.6	0.00	10.36	1.62	1	11	1	100	0.00	0.0	8.768	0	0	0	4	4	L
L CO2269	CO2058	C	2ACSR	6.94Y	115.6	0.04	10.39	16.13	9	111	11	100	0.03	0.0	8.789	0	0	0	1	11	L
L CO2270	CO2269	C	2ACSR	6.93Y	115.6	0.04	10.43	13.66	8	94	9	100	0.03	0.0	8.882	0	0	0	0	10	L
L CO2149	CO2270	C	2ACSR	6.93Y	115.6	0.00	10.43	1.66	1	11	1	100	0.00	0.0	8.945	0	0	0	0	3	L
L CO2148	CO2149	C	2ACSR	6.93Y	115.6	0.00	10.43	1.66	1	11	1	100	0.00	0.0	8.967	0	0	0	0	3	L
L CO2102	CO2148	C	4ACSR	6.93Y	115.6	0.00	10.43	1.66	1	11	1	100	0.00	0.0	9.009	0	0	0	3	3	L
L CO8226	CO2270	C	4ACSR	6.93Y	115.5	0.04	10.46	12.00	9	83	8	100	0.03	0.0	8.953	0	0	0	0	7	L
L CO1426	CO8226	C	4ACSR	6.93Y	115.5	0.01	10.47	3.24	2	22	2	100	0.00	0.0	8.989	0	0	0	1	1	L
L CO1427	CO8226	C	2ACSR	6.93Y	115.5	0.00	10.47	5.00	3	35	3	100	0.00	0.0	8.972	0	0	0	0	4	L
L CO1428	CO1427	C	2ACSR	6.93Y	115.5	0.01	10.47	5.00	3	35	3	100	0.00	0.0	9.009	0	0	0	2	4	L
L CO1429	CO1428	C	2ACSR	6.93Y	115.5	0.00	10.47	2.92	2	20	2	100	0.00	0.0	9.028	0	0	0	2	2	L
L CO1329	CO8226	C	2ACSR	6.93Y	115.5	0.01	10.47	3.76	2	26	3	99	0.00	0.0	8.998	0	0	0	2	2	L
L CO2104	CO2132	C	4ACSR	6.94Y	115.7	0.00	10.33	2.30	2	16	2	99	0.00	0.0	8.708	0	0	0	2	4	L
L CO-399594315	CO2104	C	2ACSR	6.94Y	115.7	0.00	10.34	1.34	1	9	1	99	0.00	0.0	8.788	0	0	0	2	2	L
L CO2074	CO2043	C	4ACSR	6.96Y	116.0	0.00	9.98	0.00	0	0	0	100	0.00	0.0	8.285	0	0	0	0	0	L
L CO2075	CO2041	C	4ACSR	6.99Y	116.6	0.01	9.43	3.26	2	23	2	100	0.00	0.0	7.651	0	0	0	6	6	L
L CO300253970	CO2266	C	2ACSR	7.00Y	116.7	0.00	9.28	0.00	0	0	0	100	0.00	0.0	7.512	0	0	0	0	0	L
L CO2076	CO2039	C	4ACSR	7.01Y	116.9	0.00	9.10	1.19	1	8	1	99	0.00	0.0	7.337	0	0	0	1	1	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	14251	223	0	0	0	0	386	0.00	14860	14860	Lowest Voltage = 115.53 on Element CO1429	
KVAR	1101	19	0	-14	0	0	806		1911	1911	Max Accm VoltD = 10.47 on Element CO1429	
											Max Elem VoltD = 8.53 on Element RG29378565	

Substation Summary:						
Substation	KW	KW Losses	KVAR	KVAR Losses	KVA	% Capacity
SNOW HILL	10905.67	398.00	3635.89	511.00	11495.79	0.00
SHARKEY	16621.17	456.00	3009.21	861.00	16891.38	0.00
RECTORVILLE SUB	16312.09	789.00	3984.44	1569.00	16791.67	0.00
PLUMMERS LANDIN	9587.37	402.00	427.78	567.00	9596.91	0.00
PEASTICKS	14859.53	386.00	1910.91	806.00	14981.90	0.00
OAK RIDGE	8852.29	233.00	1432.07	496.00	8967.38	0.00
MURPHYSVILLE	15277.99	1027.00	2121.15	1174.00	15424.53	0.00
MAYSVILLE	10282.29	247.00	3613.06	290.00	10898.61	0.00
HILLSBORO	12140.73	462.00	849.96	644.00	12170.44	0.00
HILDA	41267.13	1128.00	7854.28	1864.00	42007.93	0.00
FLEMINGSBURG	23486.74	552.00	3498.21	1157.00	23745.83	0.00
CHARTERS SUB	18100.28	707.00	4013.01	1314.00	18539.80	0.00
Total:	197693.28	6787.00	36349.97	11253.00	201512.16	

Balanced Voltage Drop Report

Source: SHARKEY

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

		Units Displayed In Volts														-----Element-----				
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
SHARKEY		ABC	SHARKEY	15.11Y	125.9	0.00	0.00	358.59	0	16059	2588	99	0.00	0.0	0.000	0	0	0	0	1707
----- Feeder No. 0 (Sharkey) Beginning with Device OC80 -----																				
C	CO2574	ABC	2ACSR	15.01Y	125.1	0.40	0.86	171.29	95	7732	386	100	24.41	0.3	1.109	0	0	0	1	953 C
C	CO-1183335686	ABC	2ACSR	15.00Y	125.0	0.08	0.94	171.21	95	7704	371	100	4.92	0.0	1.149	0	0	0	0	951 C
P	UD390427003	C	1/OPRIURD	14.85Y	123.7	0.00	2.21	-0.09	0	0	-1	0	0.00	0.0	3.047	0	0	0	0	0 P
P	CO2835	C	1/OPRIURD	14.85Y	123.7	0.00	2.21	-0.04	0	0	-1	0	0.00	0.0	2.958	0	0	0	0	0 P
P	CO1179333287	C	1/OPRIURD	7.35Y	122.6	0.00	3.38	-0.03	0	0	0	100	0.00	0.0	4.510	0	0	0	1	1 P
P	CO2819	C	1/OPRIURD	14.96Y	124.6	0.00	1.30	-0.15	0	0	-2	0	0.00	0.0	3.396	0	0	0	0	0 P
----- Feeder No. 0 (801/Farmers) Beginning with Device OC81 -----																				
P	UD390647001	C	1/OPRIURD	14.90Y	124.1	0.00	1.81	-0.04	0	0	-1	0	0.00	0.0	3.185	0	0	0	0	0 P
P	UD390647002	C	1/OPRIURD	14.90Y	124.1	0.00	1.81	-0.10	0	0	-2	0	0.00	0.0	3.221	0	0	0	0	0 P
P	UD390647003	C	1/OPRIURD	14.90Y	124.1	0.00	1.81	-0.03	0	0	0	100	0.00	0.0	3.246	0	0	0	0	0 P
----- Feeder No. 0 (Family Dollar) Beginning with Device OC82 -----																				
P	CO507530292	C	1/OPRIURD	15.10Y	125.8	0.00	0.14	-0.00	0	0	0	100	0.00	0.0	0.537	0	0	0	0	0 P
P	CO2824	ABC	700 MCM Hg	15.11Y	125.9	0.00	0.00	0.88	0	14	37	35	0.00	0.0	0.022	0	0	0	0	1 P
----- Feeder No. 0 (Ind. Park) Beginning with Device OC83 -----																				
P	CO2416	ABC	500PRIURD	15.11Y	125.9	0.00	0.00	0.88	0	14	37	35	0.00	0.0	0.143	0	0	0	0	1 P
P	CO2418	ABC	500PRIURD	15.11Y	125.9	0.00	0.00	1.15	0	14	50	27	0.00	0.0	0.316	0	0	0	0	1 P
P	CO-2129126233	A	1/OPRIURD	15.11Y	125.9	0.00	0.00	7.32	5	14	110	13	0.00	0.0	0.356	0	0	0	0	1 P
P	CO1602330975	A	1/OPRIURD	15.11Y	125.9	0.00	0.01	7.37	5	14	111	13	0.00	0.0	0.407	0	0	0	1	1 P
P	UD390437001	A	1/OPRIURD	15.11Y	125.9	0.00	0.01	7.35	5	12	111	11	0.00	0.0	0.419	0	0	0	0	0 P
P	UD390437003	A	1/OPRIURD	15.11Y	125.9	0.00	0.01	7.37	5	12	111	11	0.00	0.0	0.422	0	0	0	0	0 P

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total			
KW	15399	362	0	0	0	0	298		0.00	16059	Lowest Voltage =	120.96	on Element C04831
KVAR	3343	93	-936	-452	0	0	540			2588	Max Accm VoltD =	5.03	on Element C04831
											Max Elem VoltD =	4.86	on Element RG390207001

Balanced Voltage Drop Report

Source: PLUMMERS LANDIN

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

Units Displayed In Volts																						
-Base Voltage:120.0-																						
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru		
PLUMMERS LANDIN		ABC	PLUMMERS L	7.55Y	125.9	0.00	0.00	440.15	0	9972	463	100	0.00	0.0	0.000	0	0	0	0	1914		
----- Feeder No. 0 (Muses Mill) Beginning with Device OC448187580 -----																						
L	CO6219	CO6218	A	2ACSR	7.01Y	116.9	0.26	9.09	71.38	40	502	-11	-100	1.14	0.2	4.527	0	0	0	140	L	
L	CO6220	CO6219	A	2ACSR	7.01Y	116.8	0.01	9.11	71.38	40	501	-12	-100	0.08	0.0	4.537	0	0	0	1	140	L
L	CO6221	CO6220	A	2ACSR	6.98Y	116.4	0.42	9.53	70.97	39	498	-12	-100	1.85	0.3	4.761	0	0	0	0	139	L
L	CO6113	CO6221	A	2ACSR	6.97Y	116.2	0.18	9.72	70.97	39	496	-14	-100	0.82	0.1	4.860	0	0	0	1	137	L
L	CO6112	CO6113	A	2ACSR	6.95Y	115.8	0.42	10.15	70.18	39	489	-14	-100	1.83	0.3	5.087	0	0	0	0	134	L
L	CO6140	CO6112	A	2ACSR	6.95Y	115.8	0.00	10.15	0.00	0	0	0	100	0.00	0.0	5.267	0	0	0	1	1	L
L	CO6274	CO6112	A	2ACSR	6.94Y	115.6	0.15	10.30	70.18	39	488	-15	-100	0.65	0.1	5.169	0	0	0	2	133	L
L	CO6275	CO6274	A	2ACSR	6.93Y	115.5	0.14	10.44	70.18	39	487	-16	-100	0.61	0.1	5.245	0	0	0	1	131	L
L	CO6276	CO6275	A	2ACSR	6.92Y	115.3	0.19	10.64	70.17	39	486	-17	-100	0.86	0.1	5.352	0	0	0	1	130	L
L	CO6111	CO6276	A	2ACSR	6.90Y	115.1	0.20	10.85	69.21	38	479	-17	-100	0.89	0.1	5.466	0	0	0	0	127	L
L	CO6228	CO6111	A	2ACSR	6.90Y	115.1	0.00	10.85	3.29	2	23	-1	-100	0.00	0.0	5.529	0	0	0	0	7	L
L	CO6229	CO6228	A	2ACSR	6.90Y	115.1	0.00	10.86	3.29	2	23	-1	-100	0.00	0.0	5.624	0	0	0	2	7	L
L	CO6146	CO6229	A	2ACSR	6.90Y	115.1	0.00	10.86	0.00	0	0	0	100	0.00	0.0	5.662	0	0	0	1	1	L
L	CO6332	CO6229	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	5.631	0	0	0	0	4	L
L	OC182	CO6332	A	15 H OCR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	5.631	0	0	0	0	4	L
L	CO6333	OC182	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	5.725	0	0	0	0	4	L
L	CO6230	CO6333	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	5.774	0	0	0	0	4	L
L	CO6231	CO6230	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	5.935	0	0	0	2	4	L
L	CO6232	CO6231	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	6.000	0	0	0	0	2	L
L	CO6145	CO6232	A	2ACSR	6.90Y	115.1	0.00	10.86	0.00	0	0	0	100	0.00	0.0	6.057	0	0	0	1	1	L
L	CO6233	CO6232	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	6.076	0	0	0	0	1	L
L	CO6234	CO6233	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	6.133	0	0	0	0	1	L
L	CO6235	CO6234	A	2ACSR	6.90Y	115.1	0.00	10.86	0.04	0	0	0	100	0.00	0.0	6.303	0	0	0	1	1	L
L	CO6226	CO6276	A	2ACSR	6.92Y	115.3	0.00	10.64	0.95	1	7	0	100	0.00	0.0	5.466	0	0	0	1	2	L
L	CO6227	CO6226	A	2ACSR	6.92Y	115.3	0.00	10.65	0.95	1	7	0	100	0.00	0.0	5.580	0	0	0	0	1	L
L	CO6225	CO6227	A	2ACSR	6.92Y	115.3	0.00	10.65	0.95	1	7	0	100	0.00	0.0	5.750	0	0	0	1	1	L
L	CO6139	CO6113	A	2ACSR	6.97Y	116.2	0.00	9.72	0.79	0	6	0	100	0.00	0.0	4.983	0	0	0	2	2	L
L	CO6223	CO6221	A	2ACSR	6.98Y	116.4	0.00	9.53	0.00	0	0	0	100	0.00	0.0	4.817	0	0	0	1	2	L
L	CO6224	CO6223	A	2ACSR	6.98Y	116.4	0.00	9.53	0.00	0	0	0	100	0.00	0.0	4.912	0	0	0	0	1	L
L	CO6222	CO6224	A	2ACSR	6.98Y	116.4	0.00	9.53	0.00	0	0	0	100	0.00	0.0	4.950	0	0	0	1	1	L

----- Feeder No. 0 (Bluebank) Beginning with Device OC-1800607339 -----

C	CO-1952292198	CO1769567024	ABC	2ACSR	7.55Y	125.9	0.03	0.04	205.73	114	4601	776	99	1.33	0.0	0.010	0	0	0	0	750	C	
C	CO-1291772028	CO-1952292198	ABC	2ACSR	7.55Y	125.8	0.10	0.15	205.73	114	4600	775	99	3.74	0.0	0.031	0	0	0	0	0	750	C
C	CO2080275668	CO-1291772028	ABC	2ACSR	7.53Y	125.5	0.30	0.45	205.73	114	4596	772	99	10.46	0.2	0.089	0	0	0	0	0	750	C
C	CO1062602769	CO2080275668	ABC	2ACSR	7.51Y	125.2	0.30	0.76	205.73	114	4586	766	99	10.48	0.2	0.148	0	0	0	0	0	750	C
C	CO28398208	CO1062602769	ABC	2ACSR	7.51Y	125.1	0.05	0.81	205.73	114	4575	760	99	1.82	0.0	0.158	0	0	0	0	0	750	C
C	CO-774506312	CO1612322580	ABC	2ACSR	7.49Y	124.9	0.20	1.08	205.73	114	4572	755	99	6.96	0.1	0.241	0	0	0	0	0	750	C

----- Feeder No. 0 (Hillsboro) Beginning with Device OC1078882550 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	9420	155	0	0	0	0	396	0.00	9972	463	Lowest Voltage = 115.13	on Element C06235
KVAR	565	8	-651	-6	0	0	545				Max Accm VoltD = 10.86	on Element C06235
											Max Elem VoltD = 10.85	on Element RG330216001

Balanced Voltage Drop Report

Source: CHARTERS SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

		Units Displayed In Volts																		
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru
CHARTERS SUB	ABC	CHARTERS S	15.11Y	125.9	0.00	0.00	407.41	0	18062	3910	98	0.00	0.0	0.000	0	0	0	0	4222	
----- Feeder No. 0 (Salt Lick) Beginning with Device OC618 -----																				
----- Feeder No. 0 (Vanceburg) Beginning with Device OC617 -----																				
----- Feeder No. 0 (Holly) Beginning with Device OC619 -----																				
L CO7298	CO7297	C	4ACSR	7.01Y 116.9	0.04	9.00	3.50	3	24	6	97	0.00	0.0	0.0	18.407	0	0	0	0	4 L
L CO7295	CO7298	C	4ACSR	7.01Y 116.9	0.00	9.01	3.50	3	24	6	97	0.00	0.0	0.0	18.444	0	0	0	1	4 L
L CO7296	CO7295	C	4ACSR	7.01Y 116.9	0.01	9.02	1.73	1	12	3	97	0.00	0.0	0.0	18.608	0	0	0	0	3 L
L CO7254	CO7296	C	4ACSR	7.01Y 116.9	0.02	9.05	1.73	1	12	3	97	0.00	0.0	0.0	18.918	0	0	0	1	3 L
L CO7255	CO7254	C	4ACSR	7.01Y 116.9	0.00	9.06	1.52	1	10	3	96	0.00	0.0	0.0	19.036	0	0	0	1	1 L
L CO7256	CO7254	C	2ACSR	7.01Y 116.9	0.00	9.05	0.21	0	1	0	100	0.00	0.0	0.0	19.032	0	0	0	0	1 L
L CO7257	CO7256	C	2ACSR	7.01Y 116.9	0.00	9.05	0.21	0	1	0	100	0.00	0.0	0.0	19.171	0	0	0	1	1 L
L CO7127	CO7129	C	4ACSR	7.01Y 116.9	0.11	9.05	14.67	10	100	25	97	0.09	0.0	0.0	17.318	0	0	0	0	32 L
L CO7130	CO7127	C	4ACSR	7.01Y 116.9	0.01	9.06	11.17	8	76	19	97	0.01	0.0	0.0	17.354	0	0	0	1	24 L
L CO7131	CO7130	C	4ACSR	7.01Y 116.8	0.06	9.13	9.95	7	68	17	97	0.03	0.0	0.0	17.504	0	0	0	0	23 L
L CO7132	CO7131	C	4ACSR	7.00Y 116.8	0.05	9.19	9.95	7	68	17	97	0.02	0.0	0.0	17.624	0	0	0	2	23 L
L CO7133	CO7132	C	4ACSR	7.00Y 116.8	0.00	9.19	8.52	6	58	15	97	0.00	0.0	0.0	17.642	0	0	0	1	21 L
L CO7134	CO7133	C	4ACSR	7.00Y 116.7	0.00	9.20	6.72	5	46	11	97	0.00	0.0	0.0	17.658	0	0	0	0	20 L
L CO7172	CO7134	C	700 MCM Hd	7.00Y 116.7	0.00	9.20	6.72	1	46	11	97	0.00	0.0	0.0	17.665	0	0	0	0	20 L
L OC194	CO7172	C	10 H OCR	7.00Y 116.7	0.00	9.20	6.72	67	46	11	97	0.00	0.0	0.0	17.665	0	0	0	0	20 L
L CO7140	OC194	C	4ACSR	7.00Y 116.7	0.01	9.21	4.17	3	28	7	97	0.00	0.0	0.0	17.735	0	0	0	2	12 L
L CO7141	CO7140	C	4ACSR	7.00Y 116.7	0.05	9.26	4.17	3	28	7	97	0.01	0.0	0.0	17.996	0	0	0	0	10 L
L CO7108	CO7141	C	4ACSR	7.00Y 116.7	0.00	9.27	1.28	1	9	2	98	0.00	0.0	0.0	18.043	0	0	0	2	2 L
L CO7102	CO7141	C	4ACSR	7.00Y 116.7	0.02	9.29	2.89	2	20	5	97	0.00	0.0	0.0	18.181	0	0	0	0	8 L
L CO7103	CO7102	C	4ACSR	7.00Y 116.7	0.00	9.29	0.00	0	0	0	100	0.00	0.0	0.0	18.483	0	0	0	0	1 L
L CO7100	CO7103	C	4ACSR	7.00Y 116.7	0.00	9.29	0.00	0	0	0	100	0.00	0.0	0.0	18.559	0	0	0	1	1 L
L CO7142	CO7102	C	4ACSR	7.00Y 116.6	0.03	9.32	2.89	2	20	5	97	0.00	0.0	0.0	18.419	0	0	0	1	7 L
L CO7143	CO7142	C	4ACSR	6.99Y 116.6	0.03	9.35	2.89	2	20	5	97	0.00	0.0	0.0	18.682	0	0	0	1	6 L
L CO8301	CO7143	C	4ACSR	6.99Y 116.6	0.03	9.39	2.89	2	20	5	97	0.00	0.0	0.0	18.915	0	0	0	2	5 L
L CO4690	CO8301	C	4ACSR	6.99Y 116.6	0.00	9.39	0.00	0	0	0	100	0.00	0.0	0.0	18.990	0	0	0	1	3 L
L CO4691	CO4690	C	4ACSR	6.99Y 116.6	0.00	9.39	0.00	0	0	0	100	0.00	0.0	0.0	19.021	0	0	0	2	2 L
L CO4692	CO4691	C	4ACSR	6.99Y 116.6	0.00	9.39	0.00	0	0	0	100	0.00	0.0	0.0	19.101	0	0	0	0	0 L
L CO7135	OC194	C	4ACSR	7.00Y 116.7	0.00	9.21	2.55	2	17	4	97	0.00	0.0	0.0	17.734	0	0	0	0	8 L
L CO7136	CO7135	C	4ACSR	7.00Y 116.7	0.00	9.22	2.55	2	17	4	97	0.00	0.0	0.0	17.799	0	0	0	1	8 L
L CO7137	CO7136	C	4ACSR	7.00Y 116.7	0.01	9.23	2.46	2	17	4	97	0.00	0.0	0.0	17.906	0	0	0	0	7 L
L CO7138	CO7137	C	4ACSR	7.00Y 116.7	0.00	9.24	2.04	1	14	3	98	0.00	0.0	0.0	18.006	0	0	0	1	4 L
L CO7139	CO7138	C	4ACSR	7.00Y 116.7	0.02	9.26	1.51	1	10	3	96	0.00	0.0	0.0	18.333	0	0	0	0	2 L
L CO7109	CO7139	C	4ACSR	7.00Y 116.7	0.00	9.26	0.26	0	2	0	100	0.00	0.0	0.0	18.381	0	0	0	1	1 L
L CO7110	CO7139	C	4ACSR	7.00Y 116.7	0.00	9.27	1.24	1	8	2	97	0.00	0.0	0.0	18.485	0	0	0	1	1 L
L CO-1432945604	CO7138	C	2ACSR	7.00Y 116.7	0.00	9.24	0.53	0	4	1	97	0.00	0.0	0.0	18.057	0	0	0	1	1 L
L CO7111	CO7137	C	4ACSR	7.00Y 116.7	0.00	9.23	0.41	0	3	1	95	0.00	0.0	0.0	17.962	0	0	0	3	3 L
L CO7173	CO7127	C	4ACSR	7.01Y 116.9	0.00	9.05	3.49	2	24	6	97	0.00	0.0	0.0	17.325	0	0	0	0	8 L
L OC193	CO7173	C	15 H OCR	7.01Y 116.9	0.00	9.05	3.49	23	24	6	97	0.00	0.0	0.0	17.325	0	0	0	0	8 L
L CO7174	OC193	C	4ACSR	7.01Y 116.9	0.01	9.06	3.49	2	24	6	97	0.00	0.0	0.0	17.439	0	0	0	0	8 L
L CO7144	CO7174	C	4ACSR	7.01Y 116.9	0.00	9.07	3.49	2	24	6	97	0.00	0.0	0.0	17.500	0	0	0	0	8 L
L CO7107	CO7144	C	4ACSR	7.01Y 116.9	0.00	9.08	0.73	1	5	1	98	0.00	0.0	0.0	17.595	0	0	0	1	1 L
L CO7145	CO7144	C	4ACSR	7.01Y 116.8	0.03	9.11	2.76	2	19	5	97	0.00	0.0	0.0	17.803	0	0	0	0	7 L
L CO7146	CO7145	C	4ACSR	7.01Y 116.8	0.01	9.13	2.76	2	19	5	97	0.00	0.0	0.0	17.959	0	0	0	0	7 L
L CO7147	CO7146	C	4ACSR	7.01Y 116.8	0.01	9.15	2.76	2	19	5	97	0.00	0.0	0.0	18.087	0	0	0	0	7 L
L CO7148	CO7147	C	4ACSR	7.01Y 116.8	0.01	9.16	2.76	2	19	5	97	0.00	0.0	0.0	18.182	0	0	0	0	7 L
L CO7149	CO7148	C	4ACSR	7.00Y 116.8	0.01	9.17	2.76	2	19	5	97	0.00	0.0	0.0	18.286	0	0	0	0	7 L
L CO7150	CO7149	C	4ACSR	7.00Y 116.8	0.00	9.18	2.31	2	16	4	97	0.00	0.0	0.0	18.376	0	0	0	0	1 L
L CO7151	CO7150	C	4ACSR	7.00Y 116.7	0.01	9.20	2.31	2	16	4	97	0.00	0.0	0.0	18.490	0	0	0	0	1 L
L CO7152	CO7151	C	4ACSR	7.00Y 116.7	0.00	9.20	2.31	2	16	4	97	0.00	0.0	0.0	18.546	0	0	0	0	1 L
L CO7153	CO7152	C	4ACSR	7.00Y 116.7	0.00	9.21	2.31	2	16	4	97	0.00	0.0	0.0	18.608	0	0	0	0	1 L
L CO7154	CO7153	C	4ACSR	7.00Y 116.7	0.00	9.22	2.31	2	16	4	97	0.00	0.0	0.0	18.676	0	0	0	0	1 L
L CO7155	CO7154	C	4ACSR	7.00Y 116.7	0.00	9.22	2.31	2	16	4	97	0.00	0.0	0.0	18.745	0	0	0	1	1 L
L CO7156	CO7149	C	4ACSR	7.00Y 116.8	0.00	9.18	0.44	0	3	1	95	0.00	0.0	0.0	18.331	0	0	0	1	6 L
L CO7157	CO7156	C	4ACSR	7.00Y 116.8	0.00	9.18	0.44	0	3	1	95	0.00	0.0	0.0	18.475	0	0	0	0	5 L
L CO7158	CO7157	C	4ACSR	7.00Y 116.8	0.00	9.18	0.18	0	1	0	100	0.00	0.0	0.0	18.759	0	0	0	0	1 L
L CO7159	CO7158	C	4ACSR	7.00Y 116.8	0.00	9.18	0.18	0	1	0	100	0.00	0.0	0.0	18.844	0	0	0	0	1 L
L CO7160	CO7159	C	4ACSR	7.00Y 116.8	0.00	9.18	0.18	0	1	0	100	0.00	0.0	0.0	19.071	0	0	0	0	1 L
L CO7161	CO7160	C	4ACSR	7.00Y 116.8	0.00	9.18	0.18	0	1	0	100	0.00	0.0	0.0	19.145	0	0	0	0	1 L
L CO7162	CO7161	C	4ACSR																	

Balanced Voltage Drop Report
Source: CHARTERS SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

Units Displayed In Volts																			
-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	-----Element----- Length (mi)	Cons On	Cons Thru	
L C07105	C07171	C	4ACSR	7.00Y	116.8	0.00	9.18	0.01	0	0	0	100	0.00	0.0	18.987	0	0	1	1 L
----- Feeder No. 0 (Herron Hill) Beginning with Device OC616 -----																			
P UD220333001	CO1570593993	C	1/OPRIURD	15.02Y	125.2	0.00	0.75	-0.05	0	0	-1	0	0.00	0.0	2.853	0	0	0	0 P
L C021284	C021286	A	6ACWC	7.01Y	116.9	0.03	9.00	9.57	7	64	20	95	0.01	0.0	8.444	0	0	1	20 L
L C021285	C021284	A	6ACWC	7.01Y	116.9	0.04	9.05	7.76	6	52	16	96	0.01	0.0	8.569	0	0	2	19 L
L OH210868001	C021285	A	6ACWC	7.01Y	116.9	0.00	9.05	0.35	0	2	1	89	0.00	0.0	8.631	0	0	0	0 L
L C021288	C021285	A	6ACWC	7.01Y	116.8	0.06	9.11	7.17	5	48	15	95	0.02	0.0	8.757	0	0	1	17 L
L C021287	C021288	A	6ACWC	7.01Y	116.8	0.02	9.13	7.17	5	48	15	95	0.00	0.0	8.828	0	0	0	16 L
L C021195	C021287	A	6ACWC	7.01Y	116.8	0.02	9.16	6.45	5	43	13	96	0.00	0.0	8.904	0	0	0	12 L
L C021196	C021195	A	6ACWC	7.01Y	116.8	0.00	9.16	0.24	0	2	1	89	0.00	0.0	8.970	0	0	0	2 L
L C021219	C021196	A	6ACWC	7.01Y	116.8	0.00	9.16	0.00	0	0	0	100	0.00	0.0	9.023	0	0	0	0 L
L C021220	C021196	A	6ACWC	7.01Y	116.8	0.00	9.16	0.24	0	2	1	89	0.00	0.0	9.064	0	0	2	2 L
L CO-706580733	C021195	A	2ACSR	7.00Y	116.8	0.03	9.19	6.20	3	42	13	96	0.01	0.0	9.081	0	0	0	10 L
L CO-2120450629	CO-706580733	A	2ACSR	7.00Y	116.7	0.01	9.21	5.92	3	40	12	96	0.00	0.0	9.171	0	0	0	9 L
L CO1389486039	CO-2120450629	A	2ACSR	7.00Y	116.7	0.04	9.26	5.92	3	40	12	96	0.01	0.0	9.416	0	0	0	9 L
L C021331	CO1389486039	A	6ACWC	7.00Y	116.7	0.01	9.27	2.03	1	14	4	96	0.00	0.0	9.542	0	0	0	3 L
L C021333	C021331	A	6ACWC	7.00Y	116.7	0.00	9.28	2.03	1	14	4	96	0.00	0.0	9.607	0	0	1	2 L
L C021332	C021333	A	6ACWC	7.00Y	116.7	0.00	9.28	1.05	1	7	2	96	0.00	0.0	9.681	0	0	1	1 L
L C021223	C021331	A	4/OACSR	7.00Y	116.7	0.00	9.27	0.00	0	0	0	100	0.00	0.0	9.589	0	0	1	1 L
L C021299	CO1389486039	A	6ACWC	7.00Y	116.7	0.02	9.28	3.88	3	26	8	96	0.00	0.0	9.548	0	0	1	6 L
L C021292	C021299	A	6ACWC	7.00Y	116.6	0.01	9.30	2.64	2	18	6	95	0.00	0.0	9.686	0	0	1	5 L
L C021298	C021292	A	6ACWC	7.00Y	116.6	0.00	9.31	1.61	1	11	3	96	0.00	0.0	9.807	0	0	1	4 L
L C021293	C021298	A	6ACWC	7.00Y	116.6	0.00	9.31	0.18	0	1	0	100	0.00	0.0	9.830	0	0	2	3 L
L C021297	C021293	A	6ACWC	7.00Y	116.6	0.00	9.31	0.09	0	1	0	100	0.00	0.0	9.848	0	0	0	1 L
L C021294	C021297	A	6ACWC	7.00Y	116.6	0.00	9.31	0.09	0	1	0	100	0.00	0.0	9.924	0	0	0	1 L
L C021296	C021294	A	6ACWC	7.00Y	116.6	0.00	9.31	0.09	0	1	0	100	0.00	0.0	10.144	0	0	0	1 L
L C021295	C021296	A	6ACWC	7.00Y	116.6	0.00	9.31	0.09	0	1	0	100	0.00	0.0	10.210	0	0	1	1 L
L CO937351556	CO-706580733	A	1/OPRIURD	7.00Y	116.8	0.00	9.19	0.28	0	2	0	100	0.00	0.0	9.119	0	0	1	1 L
L C021289	C021287	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	8.849	0	0	0	2 L
L C021291	C021289	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.320	0	0	0	2 L
L C021290	C021291	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.375	0	0	0	2 L
L C021218	C021290	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.441	0	0	0	2 L
L C021328	C021218	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.550	0	0	0	2 L
L C021323	C021328	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.653	0	0	0	2 L
L C021327	C021323	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.695	0	0	0	2 L
L C021324	C021327	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.751	0	0	0	2 L
L C021326	C021324	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.822	0	0	0	2 L
L C021325	C021326	A	6ACWC	7.01Y	116.8	0.00	9.13	0.00	0	0	0	100	0.00	0.0	9.873	0	0	2	2 L
L C021330	C021287	A	6ACWC	7.01Y	116.8	0.00	9.14	0.71	1	5	2	93	0.00	0.0	8.892	0	0	1	2 L
L C021329	C021330	A	6ACWC	7.01Y	116.8	0.00	9.14	0.71	1	5	2	93	0.00	0.0	8.942	0	0	1	1 L
L CO-1500343273	C021284	A	2ACSR	7.01Y	116.9	0.00	9.00	0.00	0	0	0	100	0.00	0.0	8.495	0	0	0	0 L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total			
KW	17206	220	0	0	0	0	636		0.00	18062	Lowest Voltage = 116.60 on Element C08301		
KVAR	4261	47	-1580	-30	0	0	1212			3910	Max Accm VoltD = 9.39 on Element C08301		
											Max Elem VoltD = 6.98 on Element RG230555001		

Balanced Voltage Drop Report
 Source: RECTORVILLE SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

Units Displayed In Volts																								
-Base Voltage:120.0-																								
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru				
RECTORVILLE SUB		ABC	RECTORVILL	7.55Y	125.9	0.00	0.00	733.72	0	16239	3637	98	0.00	0.0	0.000	0	0	0	0	3120				
----- Feeder No. 0 (Plumville) Beginning with Device OC673 -----																								
P	CO28597	CO28309	ABC	1/OACSR	14.70Y	122.5	0.00	3.45	-2.36	1	0	-104	0	0.00	0.0	3.698	0	0	0	0	0	P		
----- Feeder No. 0 (Tollesboro) Beginning with Device OC672 -----																								
C	CO22364	OC672	ABC	4/OACSR	7.55Y	125.8	0.13	0.16	350.10	103	7761	1668	98	6.19	0.0	0.056	0	0	0	0	1454	C		
C	CO22365	CO22364	ABC	4/OACSR	7.51Y	125.3	0.50	0.67	350.10	103	7755	1658	98	23.84	0.3	0.201	0	0	0	0	1454	C		
C	CO22366	CO22365	ABC	4/OACSR	7.51Y	125.1	0.12	0.80	350.10	103	7731	1616	98	6.08	0.0	0.238	0	0	0	0	1454	C		
C	CO22367	CO22366	ABC	4/OACSR	7.49Y	124.9	0.23	1.03	350.10	103	7725	1605	98	11.28	0.1	0.307	0	0	0	0	1454	C		
C	CO22148	CO22367	ABC	1/OCU	7.41Y	123.5	1.38	2.41	340.54	110	7499	1563	98	67.96	0.9	0.659	0	0	0	2	1412	C		
C	CO22386	CO22148	ABC	1/OCU	7.39Y	123.2	0.33	2.75	340.28	110	7425	1472	98	16.72	0.2	0.746	0	0	0	0	1410	C		
C	CO22387	CO22386	ABC	1/OCU	7.34Y	122.4	0.80	3.56	340.28	110	7408	1450	98	40.16	0.5	0.954	0	0	0	0	1410	C		
C	CO22161	CO22387	ABC	1/OCU	7.31Y	121.8	0.55	4.11	335.42	108	7261	1385	98	27.10	0.3	1.099	0	0	0	1	1384	C		
C	CO22162	CO22161	ABC	1/OCU	7.30Y	121.7	0.09	4.21	334.95	108	7224	1348	98	4.80	0.0	1.125	0	0	0	0	1383	C		
C	CO22163	CO22162	ABC	1/OCU	7.29Y	121.6	0.13	4.35	296.31	96	6374	1251	98	5.92	0.0	1.165	0	0	0	0	1	1220	C	
C	CO22436	CO22163	ABC	1/OCU	7.28Y	121.4	0.18	4.53	296.09	96	6363	1243	98	7.90	0.1	1.220	0	0	0	0	1	1219	C	
C	CO22435	CO22436	ABC	1/OCU	7.28Y	121.3	0.11	4.64	296.09	96	6355	1232	98	4.80	0.0	1.253	0	0	0	0	2	1219	C	
C	CO21940	CO22435	ABC	1/OCU	7.26Y	121.1	0.23	4.88	295.92	95	6347	1225	98	10.35	0.1	1.324	0	0	0	0	1	1217	C	
C	CO22441	CO21940	ABC	1/OCU	7.26Y	121.0	0.06	4.95	292.03	94	6252	1203	98	2.68	0.0	1.342	0	0	0	0	0	1	1204	C
C	CO22440	CO22441	ABC	1/OCU	7.26Y	121.0	0.03	4.99	292.03	94	6249	1199	98	1.68	0.0	1.354	0	0	0	0	2	1204	C	
C	CO22190	CO22440	ABC	1/OCU	7.25Y	120.8	0.11	5.10	291.70	94	6240	1196	98	5.05	0.0	1.390	0	0	0	0	4	1202	C	
C	CO22191	CO22190	ABC	1/OCU	7.24Y	120.7	0.10	5.21	291.36	94	6228	1189	98	4.58	0.0	1.423	0	0	0	0	0	1	1198	C
C	CO22389	CO22191	ABC	1/OCU	7.24Y	120.7	0.05	5.26	288.75	93	6166	1179	98	2.12	0.0	1.438	0	0	0	0	0	1	1190	C
C	CO22388	CO22389	ABC	1/OCU	7.22Y	120.4	0.24	5.51	288.75	93	6164	1176	98	10.40	0.1	1.513	0	0	0	0	0	1	1190	C
C	CO21941	CO22388	ABC	1/OCU	7.21Y	120.2	0.26	5.77	288.00	93	6137	1161	98	11.11	0.1	1.593	0	0	0	0	0	1	1185	C
C	CO22391	CO21941	ABC	1/OCU	7.18Y	119.7	0.52	6.29	285.38	92	6070	1140	98	21.83	0.3	1.754	0	0	0	0	0	1	1178	C
C	CO22390	CO22391	ABC	1/OCU	7.17Y	119.6	0.09	6.39	285.38	92	6048	1111	98	3.92	0.0	1.783	0	0	0	0	0	1	1178	C
C	CO22464	CO22390	ABC	1/OCU	7.15Y	119.3	0.27	6.66	285.19	92	6040	1105	98	11.54	0.1	1.868	0	0	0	0	0	1	1175	C
C	CO22463	CO22464	ABC	1/OCU	7.14Y	119.1	0.18	6.84	285.19	92	6028	1090	98	7.69	0.1	1.925	0	0	0	0	0	1	1175	C
C	CO22465	CO22463	ABC	1/OCU	7.13Y	118.8	0.29	7.14	285.19	92	6020	1080	98	12.50	0.2	2.018	0	0	0	0	0	1	1175	C
C	CO22280	CO22465	ABC	1/OCU	7.12Y	118.6	0.18	7.33	284.71	92	5998	1062	98	7.80	0.1	2.075	0	0	0	0	0	1	1174	C
C	CO22193	CO22280	ABC	1/OCU	7.11Y	118.6	0.03	7.36	284.15	92	5978	1050	98	1.34	0.0	2.085	0	0	0	0	0	1	1173	C
L	CO22400	CO22401	ABC	1/OCU	7.00Y	116.6	0.53	9.31	260.34	84	5415	922	99	20.63	0.3	2.751	0	0	0	0	1	1088	L	
L	FSE561	CO22400	A	20 N FUSE	7.00Y	116.6	0.00	9.31	2.92	16	20	2	100	0.00	0.0	2.751	0	0	0	0	0	6	L	
L	CO22492	FSE561	A	4ACSR	7.00Y	116.6	0.00	9.31	2.92	2	20	2	100	0.00	0.0	2.758	0	0	0	0	0	6	L	
L	CO22493	CO22492	A	4ACSR	7.00Y	116.6	0.00	9.32	2.92	2	20	2	100	0.00	0.0	2.827	0	0	0	0	0	6	L	
L	CO22084	CO22493	A	4ACSR	7.00Y	116.6	0.00	9.33	2.92	2	20	2	100	0.00	0.0	2.903	0	0	0	0	1	5	L	
L	CO22342	CO22084	A	4ACSR	6.99Y	116.6	0.04	9.37	2.52	2	18	2	99	0.00	0.0	3.348	0	0	0	0	0	4	L	
L	CO22343	CO22342	A	4ACSR	6.99Y	116.6	0.01	9.38	0.91	1	6	1	99	0.00	0.0	3.600	0	0	0	0	1	2	L	
L	CO22212	CO22343	A	4ACSR	6.99Y	116.6	0.00	9.39	0.79	1	6	1	99	0.00	0.0	3.660	0	0	0	0	1	1	L	
L	CO22048	CO22212	A	2ACSR	6.99Y	116.6	0.00	9.38	1.61	1	11	1	100	0.00	0.0	3.514	0	0	0	0	2	2	L	
L	CO22012	CO22048	A	4ACSR	7.00Y	116.6	0.00	9.32	0.00	0	0	0	100	0.00	0.0	2.898	0	0	0	0	1	1	L	
L	CO21959	CO22400	ABC	1/OCU	6.98Y	116.4	0.19	9.50	259.20	84	5371	892	99	7.61	0.1	2.819	0	0	0	0	0	1	1081	L
L	FSE562	CO21959	C	20 N FUSE	6.98Y	116.4	0.00	9.50	2.99	17	21	2	100	0.00	0.0	2.819	0	0	0	0	0	2	L	
L	CO22111	FSE562	C	4ACSR	6.98Y	116.4	0.00	9.51	2.99	2	21	2	100	0.00	0.0	2.896	0	0	0	0	1	2	L	
L	CO22110	CO22111	C	4ACSR	6.98Y	116.4	0.00	9.51	2.18	2	15	2	99	0.00	0.0	2.916	0	0	0	0	1	1	L	
L	CO22201	CO22110	ABC	1/OCU	6.98Y	116.4	0.01	9.52	258.20	83	5342	880	99	0.52	0.0	2.824	0	0	0	0	0	1	1076	L
C	CO21961	CO22503	ABC	2ACSR	7.47Y	124.5	0.04	1.47	227.70	127	5045	785	99	1.66	0.0	3.372	0	0	0	0	0	1	1033	C
C	CO1199609290	CO21961	ABC	2ACSR	7.45Y	124.3	0.20	1.67	224.19	125	4965	776	99	7.73	0.1	3.409	0	0	0	0	0	1	1001	C
L	CO21362	CO825810416	A	6HDCU	7.01Y	116.9	0.06	9.00	4.23	3	30	3	100	0.01	0.0	9.363	0	0	0	0	0	5	L	
L	CO21392	CO21362	A	4ACSR	7.01Y	116.9	0.01	9.01	1.44	1	10	1	100	0.00	0.0	9.599	0	0	0	0	4	4	L	
L	CO21526	CO21392	A	6HDCU	7.01Y	116.9	0.03	9.03	2.79	2	19	2	99	0.00	0.0	9.647	0	0	0	0	1	1	L	
L	CO21525	CO21526	A	6HDCU	7.01Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	9.694	0	0	0	0	0	0	L	
L	CO21363	CO825810416	A	6HDCU	7.01Y	116.9	0.10	9.04	19.74	15	138	14	99	0.11	0.0	9.150	0	0	0	0	1	43	L	
L	CO30528	CO21363	A	6HDCU	7.01Y	116.8	0.07	9.11	19.74	15	138	14	99	0.07	0.0	9.233	0	0	0	0	0	42	L	
L	CO28024	CO30528	A	6HDCU	6.99Y	116.6	0.25	9.36	19.72	15	138	14	99	0.28	0.2	9.529	0	0	0	0	0	41	L	
L	CO28160	CO28024																						

Balanced Voltage Drop Report
Source: RECTORVILLE SUB

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		Cons On	Cons Thru	
L CO30529	CO28150	A	4ACSR	6.98Y	116.4	0.00	9.53	1.77	1	12	1	100	0.00	0.0	10.393	0	0	0	1	1	L
L CO28064	CO28147	A	4ACSR	6.99Y	116.5	0.00	9.49	1.32	1	9	1	99	0.00	0.0	9.979	0	0	0	0	0	L
L CO28029	CO28028	A	6HDCU	6.99Y	116.5	0.04	9.47	3.24	2	23	2	100	0.00	0.0	10.002	0	0	0	0	0	L
L CO28143	CO28029	A	4ACSR	6.99Y	116.5	0.00	9.47	1.93	1	13	1	100	0.00	0.0	10.032	0	0	0	0	0	L
L CO28144	CO28143	A	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.114	0	0	0	2	3	L
L CO28145	CO28144	A	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.144	0	0	0	0	0	L
L CO28142	CO28145	A	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.322	0	0	0	1	1	L
L CO28065	CO28143	A	4ACSR	6.99Y	116.5	0.00	9.47	1.93	1	13	1	100	0.00	0.0	10.055	0	0	0	2	3	L
L CO645856943	CO28065	A	4ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.114	0	0	0	1	1	L
L CO28197	CO28029	A	6HDCU	6.99Y	116.5	0.00	9.47	1.31	1	9	1	99	0.00	0.0	10.009	0	0	0	0	0	L
L OC864	CO28197	A	10 H OCR	6.99Y	116.5	0.00	9.47	1.31	13	9	1	99	0.00	0.0	10.009	0	0	0	0	0	L
L CO28198	OC864	A	6HDCU	6.99Y	116.5	0.00	9.47	1.31	1	9	1	99	0.00	0.0	10.109	0	0	0	0	0	L
L CO28201	CO28198	A	6HDCU	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.135	0	0	0	2	2	L
L CO28200	CO28201	A	6HDCU	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	10.140	0	0	0	0	0	L
L CO28058	CO28198	A	4ACSR	6.99Y	116.5	0.00	9.48	1.01	1	7	1	99	0.00	0.0	10.298	0	0	0	1	1	L
L CO28025	CO28024	A	4ACSR	6.98Y	116.4	0.17	9.54	8.70	6	61	6	100	0.08	0.1	10.002	0	0	0	0	0	L
L SW-824106434-B	CO28025	A	Closed	6.98Y	116.4	0.00	9.54	8.70	0	60	6	100	0.00	0.0	10.002	0	0	0	0	0	L
L SW-824106434-A	SW-824106434-B	A	Closed	6.98Y	116.4	0.00	9.54	8.70	0	60	6	100	0.00	0.0	10.002	0	0	0	0	0	L
L CO28026	SW-824106434-A	A	6HDCU	6.98Y	116.4	0.05	9.59	8.70	7	60	6	100	0.02	0.0	10.144	0	0	0	0	0	L
L CO28056	CO28026	A	4ACSR	6.98Y	116.3	0.00	9.60	1.00	1	7	1	99	0.00	0.0	10.203	0	0	0	4	4	L
L CO28027	CO28026	A	6HDCU	6.98Y	116.3	0.02	9.62	7.70	6	54	5	100	0.01	0.0	10.215	0	0	0	0	0	L
L CO28055	CO28027	A	2ACSR	6.98Y	116.3	0.00	9.62	1.69	1	12	1	100	0.00	0.0	10.300	0	0	0	1	2	L
L CO577135783	CO28055	A	2ACSR	6.98Y	116.3	0.00	9.62	0.00	0	0	0	100	0.00	0.0	10.423	0	0	0	1	1	L
L CO1608195401	CO28055	A	2ACSR	6.98Y	116.3	0.00	9.62	0.00	0	0	0	100	0.00	0.0	10.381	0	0	0	0	0	L
L CO28167	CO28027	A	4ACSR	6.98Y	116.3	0.00	9.63	6.01	4	42	4	100	0.00	0.0	10.251	0	0	0	1	8	L
L CO28168	CO28167	A	4ACSR	6.98Y	116.3	0.01	9.64	4.90	4	34	3	100	0.00	0.0	10.316	0	0	0	2	7	L
L CO28166	CO28168	A	4ACSR	6.98Y	116.3	0.01	9.65	4.36	3	30	3	100	0.00	0.0	10.393	0	0	0	3	5	L
L CO28165	CO28166	A	4ACSR	6.98Y	116.3	0.00	9.66	1.64	1	11	1	100	0.00	0.0	10.464	0	0	0	1	2	L
L CO28164	CO28165	A	4ACSR	6.98Y	116.3	0.00	9.66	0.00	0	0	0	100	0.00	0.0	10.582	0	0	0	0	0	L
L CO28068	CO28164	A	2ACSR	6.98Y	116.3	0.00	9.66	0.00	0	0	0	100	0.00	0.0	10.613	0	0	0	1	1	L
L CO28054	SW-824106434-A	A	4ACSR	6.98Y	116.4	0.00	9.54	0.00	0	0	0	100	0.00	0.0	10.061	0	0	0	0	0	L
L CO28053	CO30528	A	4ACSR	7.01Y	116.8	0.00	9.11	0.02	0	0	0	100	0.00	0.0	9.280	0	0	0	1	1	L
L CO30701	CO21959	ABC	1/0CU	6.98Y	116.4	0.00	9.50	0.00	0	0	0	100	0.00	0.0	2.887	0	0	0	3	3	L

----- Feeder No. 0 (Owl Hollow) Beginning with Device OC674 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	15321	153	0	0	0	0	765	0.00	16239	Lowest Voltage = 116.33 on Element CO28165		
KVAR	2496	21	-404	-20	0	0	1543		3637	Max Accm VoltD = 9.66 on Element CO28165		
										Max Elem VoltD = 9.52 on Element RG13		

Balanced Voltage Drop Report
Source: OAK RIDGE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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		Units Displayed In Volts														-----Element-----				
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
OAK RIDGE		ABC	OAK RIDGE	15.11Y	125.9	0.00	0.00	201.75	0	9031	1483	99	0.00	0.0	0.000	0	0	0	0	2227

----- Feeder No. 0 (Burtonville) Beginning with Device OC-1594071829 -----

----- Feeder No. 0 (Mud Lick) Beginning with Device OC-1938734248 -----

P	CO8154	UD270553001	C	1/0PRIURD	7.34Y	122.3	0.00	3.60	-0.02	0	0	0	100	0.00	0.0	17.470	0	0	0	0	0	P
P	CO8015	CO8154	C	1/0PRIURD	7.34Y	122.3	0.00	3.60	-0.01	0	0	0	100	0.00	0.0	17.497	0	0	0	0	0	P
P	CO8018	CO8017	C	1/0PRIURD	7.34Y	122.3	0.00	3.60	-0.02	0	0	0	100	0.00	0.0	17.590	0	0	0	0	0	P
P	CO30705	CO8028	C	1/0PRIURD	7.34Y	122.3	0.00	3.61	-0.01	0	0	0	100	0.00	0.0	17.684	0	0	0	0	0	P
P	CO8026	UD270553002	C	1/0PRIURD	7.34Y	122.3	0.00	3.61	-0.02	0	0	0	100	0.00	0.0	17.826	0	0	0	0	0	P
P	CO8024	CO8023	C	1/0PRIURD	7.34Y	122.3	0.00	3.61	-0.02	0	0	0	100	0.00	0.0	17.829	0	0	0	0	0	P
P	CO8012	CO8020	C	1/0PRIURD	7.34Y	122.3	0.00	3.61	-0.03	0	0	0	100	0.00	0.0	17.613	0	0	0	1	1	P
L	CO15692	CO15855	C	4ACSR	7.01Y	116.9	0.01	9.01	2.60	2	18	2	99	0.00	0.0	13.716	0	0	0	0	4	L
L	CO15693	CO15692	C	4ACSR	7.01Y	116.9	0.00	9.01	2.60	2	18	2	99	0.00	0.0	13.782	0	0	0	2	4	L
L	CO15694	CO15693	C	4ACSR	7.01Y	116.9	0.00	9.02	2.15	2	15	2	99	0.00	0.0	13.848	0	0	0	2	2	L

----- Feeder No. 0 (Petersville) Beginning with Device OC-1614522594 -----

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

KW	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
8665	145	0	0	0	0	0	221	0.00	9031	Lowest Voltage = 116.97 on Element CO15694		
1649	27	-641	-20	0	0	468	1483			Max Accm VoltD = 9.02 on Element CO15694		
										Max Elem VoltD = 8.98 on Element REG82		

Balanced Voltage Drop Report

Summary

Source: HILDA

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\

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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
HILDA		ABC	HILDA	7.55Y	125.9	0.00	0.00	1834.47	0	41036	6862	99	0.00	0.0	0.000	0	0	0	0	3167	
C CO448	HILDA	ABC	700 MCM Hd	7.55Y	125.9	0.02	0.02	1834.47	176	41036	6862	99	3.33	0.0	0.004	0	0	0	0	3167 C	
C CO449	CO448	ABC	700 MCM Hd	7.55Y	125.9	0.02	0.04	1834.47	176	41033	6838	99	3.33	0.0	0.008	0	0	0	0	3167 C	
----- Feeder No. 0 (Pine Hills) Beginning with Device OC30 -----																					
C CO362	CO672	ABC	4/OACSR	7.50Y	125.0	0.20	0.94	370.28	109	8263	1193	99	11.01	0.1	0.468	0	0	0	3	1143 C	
C CO697	CO362	ABC	4/OACSR	7.48Y	124.7	0.26	1.21	368.62	108	8217	1156	99	14.52	0.1	0.548	0	0	0	1	1134 C	
C CO698	CO697	ABC	4/OACSR	7.48Y	124.7	0.06	1.27	368.62	108	8202	1131	99	3.61	0.0	0.568	0	0	0	0	1133 C	
C CO483	CO698	ABC	4/OACSR	7.47Y	124.5	0.14	1.42	366.86	108	8160	1119	99	7.96	0.0	0.612	0	0	0	0	1121 C	
C CO674	CO483	ABC	4/OACSR	7.46Y	124.3	0.22	1.65	366.86	108	8152	1105	99	12.29	0.1	0.681	0	0	0	0	4	1121 C
C CO675	CO674	ABC	4/OACSR	7.45Y	124.2	0.07	1.72	366.12	108	8123	1081	99	4.11	0.0	0.704	0	0	0	0	1	1117 C
C CO673	CO675	ABC	4/OACSR	7.45Y	124.1	0.08	1.81	365.33	107	8101	1072	99	4.79	0.0	0.730	0	0	0	3	1116 C	
C CO337	CO673	ABC	4/OACSR	7.43Y	123.9	0.21	2.03	363.64	107	8059	1058	99	11.69	0.1	0.797	0	0	0	0	1	1106 C
C CO352	CO337	ABC	4/OACSR	7.42Y	123.8	0.13	2.17	362.80	107	8029	1035	99	7.33	0.0	0.838	0	0	0	0	0	1104 C
C CO499	CO352	ABC	4/OACSR	7.40Y	123.3	0.43	2.60	352.19	104	7788	988	99	22.76	0.2	0.976	0	0	0	0	0	1069 C
C CO500	CO499	ABC	4/OACSR	7.39Y	123.1	0.19	2.80	352.19	104	7765	948	99	10.36	0.1	1.039	0	0	0	0	0	1069 C
C CO803	CO500	ABC	4/OACSR	7.38Y	123.1	0.05	2.86	352.19	104	7755	930	99	3.05	0.0	1.057	0	0	0	0	1	1069 C
C CO804	CO803	ABC	4/OACSR	7.38Y	123.0	0.09	2.95	352.19	104	7752	925	99	4.94	0.0	1.087	0	0	0	0	0	1068 C
C CO650	CO804	ABC	4/OACSR	7.38Y	123.0	0.01	2.97	310.63	91	6835	782	99	0.85	0.0	1.093	0	0	0	0	0	960 C
C CO687	OC400322001	ABC	4/OACSR	7.37Y	122.9	0.09	3.06	310.63	91	6835	781	99	4.26	0.0	1.127	0	0	0	0	2	960 C
C CO688	CO687	ABC	4/OACSR	7.36Y	122.8	0.12	3.18	310.08	91	6818	772	99	5.92	0.0	1.173	0	0	0	0	0	958 C
C CO508	CO688	ABC	4/OACSR	7.36Y	122.6	0.14	3.33	310.08	91	6812	761	99	6.69	0.0	1.225	0	0	0	0	2	958 C
C CO507	CO508	ABC	4/OACSR	7.35Y	122.5	0.09	3.42	309.88	91	6801	749	99	4.45	0.0	1.260	0	0	0	0	0	956 C
C CO685	CO507	ABC	4/OACSR	7.35Y	122.5	0.06	3.48	308.29	91	6762	736	99	2.96	0.0	1.283	0	0	0	0	1	954 C
C CO999	CO840	ABC	2ACSR	7.25Y	120.8	0.21	5.16	173.90	97	3773	355	100	6.37	0.1	2.007	0	0	0	2	597 C	
C CO78310533	CO999	ABC	2ACSR	7.24Y	120.7	0.03	5.20	172.30	96	3732	338	100	1.09	0.0	2.016	0	0	0	0	0	594 C
L CO2623	CO2624	A	4ACSR	6.90Y	116.8	0.20	9.18	23.86	17	166	24	99	0.26	0.1	5.636	0	0	0	0	0	26 L
L CO2627	CO2623	A	4ACSR	6.99Y	116.5	0.25	9.44	23.86	17	166	24	99	0.33	0.2	5.877	0	0	0	1	24 L	
L CO2626	CO2627	A	4ACSR	6.99Y	116.5	0.01	9.46	22.18	16	154	22	99	0.02	0.0	5.897	0	0	0	0	1	23 L
L CO2630	CO2626	A	4ACSR	6.98Y	116.4	0.06	9.52	19.54	14	135	19	99	0.06	0.0	5.968	0	0	0	0	0	19 L
L CO2631	CO2630	A	4ACSR	6.98Y	116.3	0.08	9.60	19.54	14	135	19	99	0.08	0.0	6.062	0	0	0	0	1	19 L
L CO2629	CO2631	A	4ACSR	6.98Y	116.3	0.05	9.66	18.40	13	127	18	99	0.05	0.0	6.133	0	0	0	0	0	17 L
L CO2628	CO2629	A	4ACSR	6.97Y	116.2	0.05	9.72	18.40	13	127	18	99	0.05	0.0	6.204	0	0	0	0	0	17 L
L CO2633	CO2628	A	4ACSR	6.97Y	116.2	0.04	9.76	14.26	10	99	14	99	0.03	0.0	6.275	0	0	0	0	0	15 L
L CO2632	CO2633	A	4ACSR	6.97Y	116.1	0.05	9.82	14.26	10	99	14	99	0.04	0.0	6.370	0	0	0	0	0	15 L
L OH390438001	CO2632	A	4ACSR	6.97Y	116.1	0.00	9.82	-0.06	0	0	0	100	0.00	0.0	6.402	0	0	0	0	0	0 L
L UD390438001	OH390438001	A	1/OPRIURD	6.97Y	116.1	0.00	9.82	-0.06	0	0	0	100	0.00	0.0	6.508	0	0	0	0	0	0 L
L CO2760	CO2632	A	4ACSR	6.97Y	116.1	0.00	9.82	0.00	0	0	0	100	0.00	0.0	6.417	0	0	0	0	0	1 L
L CO2762	CO2760	A	4ACSR	6.97Y	116.1	0.00	9.82	0.00	0	0	0	100	0.00	0.0	6.488	0	0	0	0	0	1 L
L CO2761	CO2762	A	4ACSR	6.97Y	116.1	0.00	9.82	0.00	0	0	0	100	0.00	0.0	6.607	0	0	0	0	1	1 L
L CO2466	CO2632	A	4ACSR	6.96Y	116.1	0.00	9.83	4.13	3	29	4	99	0.00	0.0	6.417	0	0	0	0	1	1 L
L CO2406	CO2632	A	4ACSR	6.96Y	116.1	0.02	9.84	10.14	7	70	10	99	0.01	0.0	6.417	0	0	0	0	0	13 L
L CO2467	CO2406	A	4ACSR	6.96Y	116.1	0.00	9.85	1.35	1	9	1	99	0.00	0.0	6.500	0	0	0	0	1	1 L
L CO2635	CO2406	A	4ACSR	6.96Y	116.1	0.04	9.88	8.78	6	61	9	99	0.02	0.0	6.524	0	0	0	0	0	12 L
L CO2634	CO2635	A	4ACSR	6.96Y	116.0	0.03	9.92	8.78	6	61	9	99	0.01	0.0	6.619	0	0	0	0	0	12 L
L CO2407	CO2634	A	4ACSR	6.96Y	116.0	0.07	9.99	8.46	6	58	8	99	0.03	0.0	6.808	0	0	0	0	0	11 L
L CO2408	CO2407	A	4ACSR	6.95Y	115.9	0.01	10.00	6.63	5	46	7	99	0.00	0.0	6.844	0	0	0	0	0	8 L
L CO2409	CO2408	A	4ACSR	6.95Y	115.9	0.01	10.02	5.83	4	40	6	99	0.00	0.0	6.903	0	0	0	0	0	7 L
L CO2468	CO2409	A	4ACSR	6.95Y	115.9	0.00	10.02	1.75	1	12	2	99	0.00	0.0	6.962	0	0	0	0	1	1 L
L CO2410	CO2409	A	4ACSR	6.95Y	115.9	0.04	10.06	4.08	3	28	4	99	0.01	0.0	7.152	0	0	0	0	1	6 L
L CO2469	CO2410	A	4ACSR	6.95Y	115.9	0.00	10.07	1.13	1	8	1	99	0.00	0.0	7.211	0	0	0	0	2	2 L
L CO2470	CO2410	A	4ACSR	6.95Y	115.9	0.00	10.06	0.15	0	1	0	100	0.00	0.0	7.211	0	0	0	0	1	1 L
L CO2765	CO2410	A	4ACSR	6.95Y	115.9	0.00	10.07	2.79	2	19	3	99	0.00	0.0	7.223	0	0	0	0	0	2 L
L CO2767	CO2765	A	4ACSR	6.95Y	115.9	0.00	10.08	2.79	2	19	3	99	0.00	0.0	7.270	0	0	0	0	1	2 L
L CO2766	CO2767	A	4ACSR	6.95Y	115.9	0.00	10.09	1.35	1	9	1	99	0.00	0.0	7.412	0	0	0	0	1	1 L
L CO2471	CO2408	A	4ACSR	6.95Y	115.9	0.00	10.01	0.79	1	6	1	99	0.00	0.0	6.962	0	0	0	0	1	1 L
L CO2472	CO2407	A	4ACSR	6.95Y	115.9	0.00	10.00	1.82	1	13	2	99	0.00	0.0	6.903	0	0	0	0	3	3 L
L CO2764	CO2634	A	4ACSR	6.96Y	116.0	0.00	9.92	0.32	0	2	0	100	0.00	0.0	6.713	0	0	0	0	0	1 L
L CO2763	CO2764	A	4ACSR	6.96Y	116.0	0.00	9.92	0.32	0	2	0	100	0.00	0.0	6.808	0	0	0	0	1	1 L
L CO2465	CO2628	A	4ACSR	6.97Y	116.2	0.00	9.72	1.74	1	12	2	99									

Balanced Voltage Drop Report
Source: HILDA

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element		Cons On	Cons Thru	
L	CO1969		C 4ACSR	6.98Y	116.3	0.11	9.61	79.13	57	499	238	90	0.45	0.0	4.155	0	0	0	1	84	L
L	CO1712		C 4ACSR	6.95Y	115.8	0.49	10.11	78.22	56	493	235	90	2.01	0.4	4.288	0	0	0	1	83	L
L	CO1971		C 4ACSR	6.93Y	115.5	0.30	10.41	78.09	56	490	233	90	1.22	0.2	4.369	0	0	0	0	82	L
----- Feeder No. 0 (Interchange) Beginning with Device OC27 -----																					
----- Feeder No. 0 (Cranston) Beginning with Device OC31 -----																					
C	CO1310280569		ABC 2ACSR	7.28Y	121.3	0.14	4.66	192.28	107	4203	-112	-100	5.05	0.1	2.538	0	0	0	0	671	C
C	CO-1600802925		ABC 2ACSR	7.22Y	120.3	1.00	5.66	190.34	106	4156	-119	-100	35.04	0.8	2.767	0	0	0	0	668	C
L	CO1047		B 8ACWC	7.01Y	116.9	0.20	9.04	26.57	27	172	72	92	0.29	0.1	4.563	0	0	0	0	8	L
L	CO1059		B 8ACWC	7.00Y	116.8	0.15	9.19	26.56	27	172	72	92	0.22	0.1	4.648	0	0	0	1	7	L
L	CO1060		B 8ACWC	7.00Y	116.7	0.03	9.23	26.11	26	168	72	92	0.05	0.0	4.668	0	0	0	2	6	L
L	CO1171		B 8ACWC	6.99Y	116.5	0.19	9.42	23.49	23	149	70	91	0.25	0.1	4.790	0	0	0	0	4	L
L	CO1048		B 8ACWC	6.99Y	116.5	0.02	9.45	23.49	23	149	70	91	0.03	0.0	4.809	0	0	0	0	4	L
L	CO1049		B 8ACWC	6.99Y	116.5	0.04	9.49	23.49	23	149	70	91	0.06	0.0	4.839	0	0	0	0	4	L
L	CO1050		B 8ACWC	6.96Y	116.0	0.41	9.91	23.49	23	149	70	91	0.54	0.3	5.104	0	0	0	0	4	L
L	CO891		B 8ACWC	6.96Y	116.0	0.00	9.91	0.03	0	0	0	100	0.00	0.0	5.246	0	0	0	2	2	L
L	CO844		B 8ACWC	6.95Y	115.9	0.16	10.08	23.46	23	148	70	90	0.21	0.1	5.208	0	0	0	0	2	L
L	CO892		B 1/OPRIURD	6.95Y	115.8	0.06	10.14	12.95	9	81	39	90	0.03	0.0	5.406	0	0	0	1	1	L
L	CO893		B 1/OPRIURD	6.95Y	115.8	0.07	10.15	10.50	7	66	31	91	0.03	0.0	5.483	0	0	0	1	1	L
L	CO894		B 8ACWC	7.01Y	116.9	0.00	9.04	0.01	0	0	0	100	0.00	0.0	4.639	0	0	0	1	1	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total		
KW	39226	724	0	0	0	0	1086	0.00	41036	Lowest Voltage = 115.58 on Element CO1971	
KVAR	7462	148	-2486	-63	0	0	1800		6862	Max Accm VoltD = 10.41 on Element CO1971	
										Max Elem VoltD = 10.41 on Element REG55	

Balanced Voltage Drop Report

Source: HILLSBORO

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Units Displayed In Volts				KVAR	PF	kW Loss	% Loss	mi From Src	-----Element-----		Cons On	Cons Thru	
							-Base Voltage:120.0-	Accum Drop	Thru Amps	% Thru						Length (mi)	KW			KVAR
HILLSBORO		ABC	HILLSBORO	15.11Y	125.9	0.00	0.00	272.39	0	12335	725	100	0.00	0.0	0.000	0	0	0	0	2747
----- Feeder No. 0 (Grange City) Beginning with Device OC164 -----																				
P CO-1786790005	CO-2079297545	C	2ACSR	15.08Y	125.7	0.00	0.27	-0.05	0	0	-1	0	0.00	0.0	0.670	0	0	0	1	1 P
P UD320869001	CO-1786790005	C	1/0PRIURD	15.08Y	125.7	0.00	0.27	-0.05	0	0	-1	0	0.00	0.0	0.709	0	0	0	0	0 P
----- Feeder No. 0 (Sherburne) Beginning with Device OC162 -----																				
----- Feeder No. 0 (Poplar Plains) Beginning with Device OC163 -----																				
----- Feeder No. 0 (Ringos) Beginning with Device OC165 -----																				

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	11816	153	0	0	0	0	366	0.00	12335	12335	Lowest Voltage = 117.01	on Element C012418
KVAR	549	8	-306	-14	0	0	487		725	725	Max Accm VoltD = 8.98	on Element C012418
											Max Elem VoltD = 7.27	on Element RG1260263416

Balanced Voltage Drop Report

Source: FLEMINGSBURG

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
 Title:
 Case:

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Units Displayed In Volts										mi From Src	Length (mi)	Element		Cons On	Cons Thru
							Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	-----KW	-----KVAR						
----- Feeder No. 0 (Hospital) Beginning with Device OC470 -----																						
P C015948	C015947	C	1/OPRIURD	15.10Y	125.8	0.00	0.10	-0.00	0	0	0	100	0.00	0.0	0.501	0	0	0	0	0	P	
----- Feeder No. 0 (Toyo Seat) Beginning with Device OC469 -----																						
P C015670	C015841	C	1/OPRIURD	7.47Y	124.5	0.00	1.48	-0.05	0	0	0	100	0.00	0.0	6.810	0	0	0	1	1	P	
----- Feeder No. 0 (Cowan) Beginning with Device OC468 -----																						
P C013811	C013873	C	4ACSR	7.34Y	122.4	0.00	3.53	-0.02	0	0	0	100	0.00	0.0	9.645	0	0	0	1	1	P	
P UD310429001	C013811	C	1/OPRIURD	7.34Y	122.4	0.00	3.53	-0.02	0	0	0	100	0.00	0.0	9.652	0	0	0	0	0	P	
P UD310439001	UD310429001	C	1/OPRIURD	7.34Y	122.4	0.00	3.53	-0.01	0	0	0	100	0.00	0.0	9.680	0	0	0	0	0	P	
P C044665329	C016294	C	1/OPRIURD	7.26Y	121.1	0.00	4.88	-0.05	0	0	0	100	0.00	0.0	11.923	0	0	0	0	0	P	
----- Feeder No. 0 (Tilton) Beginning with Device OC467 -----																						
----- Feeder No. 0 (Underbuild) Beginning with Device OC466 -----																						
L C07583	C07569	A	2ACSR	7.01Y	116.9	0.04	9.02	23.89	13	167	20	99	0.06	0.0	11.934	0	0	0	0	29	L	
L C07584	C07583	A	2ACSR	7.01Y	116.9	0.02	9.05	23.89	13	167	20	99	0.03	0.0	11.975	0	0	0	0	29	L	
L C07585	C07584	A	2ACSR	7.01Y	116.9	0.03	9.09	23.89	13	166	20	99	0.04	0.0	12.024	0	0	0	0	29	L	
L C07586	C07585	A	2ACSR	7.00Y	116.8	0.10	9.19	23.89	13	166	20	99	0.13	0.0	12.168	0	0	0	0	29	L	
L C07587	C07586	A	2ACSR	7.00Y	116.7	0.07	9.27	23.89	13	166	20	99	0.09	0.0	12.273	0	0	0	0	29	L	
L C07588	C07587	A	2ACSR	6.99Y	116.6	0.12	9.39	23.89	13	166	19	99	0.16	0.1	12.453	0	0	0	0	29	L	
L C07792	C07588	A	2ACSR	6.99Y	116.5	0.04	9.44	23.89	13	166	19	99	0.05	0.0	12.516	0	0	0	0	29	L	
L CO-1505383493	C07792	A	2ACSR	6.99Y	116.5	0.00	9.44	23.89	13	166	19	99	0.00	0.0	12.520	0	0	0	0	29	L	
L C07468	CO-1505383493	A	2ACSR	6.99Y	116.5	0.03	9.48	14.47	8	101	12	99	0.02	0.0	12.597	0	0	0	0	16	L	
L C07576	C07468	A	2ACSR	6.99Y	116.5	0.00	9.48	2.27	1	16	2	99	0.00	0.0	12.663	0	0	0	1	4	L	
L C08368	C07576	A	2ACSR	6.99Y	116.5	0.00	9.49	1.68	1	12	1	100	0.00	0.0	12.776	0	0	0	0	3	L	
L C07346	C08368	A	2ACSR	6.99Y	116.5	0.00	9.49	1.68	1	12	1	100	0.00	0.0	12.824	0	0	0	0	3	L	
L C07344	C07346	A	2ACSR	6.98Y	116.4	0.01	9.50	1.68	1	12	1	100	0.00	0.0	13.070	0	0	0	1	3	L	
L C07345	C07344	A	2ACSR	6.98Y	116.4	0.00	9.50	0.00	0	0	0	100	0.00	0.0	13.147	0	0	0	2	2	L	
L C07433	C08368	A	2ACSR	6.99Y	116.5	0.00	9.49	0.00	0	0	0	100	0.00	0.0	12.838	0	0	0	0	0	L	
L C07577	C07468	A	2ACSR	6.99Y	116.5	0.01	9.49	8.95	5	62	7	99	0.00	0.0	12.634	0	0	0	3	10	L	
L C07578	C07577	A	2ACSR	6.98Y	116.4	0.02	9.51	6.38	4	44	5	99	0.00	0.0	12.748	0	0	0	3	7	L	
L C07579	C07578	A	2ACSR	6.98Y	116.4	0.01	9.52	3.73	2	26	3	99	0.00	0.0	12.900	0	0	0	1	4	L	
L C07580	C07579	A	2ACSR	6.98Y	116.4	0.01	9.54	3.52	2	24	3	99	0.00	0.0	13.023	0	0	0	0	3	L	
L C07581	C07580	A	2ACSR	6.98Y	116.4	0.00	9.55	3.52	2	24	3	99	0.00	0.0	13.098	0	0	0	0	3	L	
L C07582	C07581	A	2ACSR	6.98Y	116.4	0.00	9.55	3.52	2	24	3	99	0.00	0.0	13.174	0	0	0	0	3	L	
L C07526	C07582	A	2ACSR	6.98Y	116.4	0.00	9.56	2.57	1	18	2	99	0.00	0.0	13.269	0	0	0	1	1	L	
L C07644	C07582	A	2ACSR	6.98Y	116.4	0.00	9.56	0.95	1	7	1	99	0.00	0.0	13.250	0	0	0	0	2	L	
L C07645	C07644	A	2ACSR	6.98Y	116.4	0.00	9.56	0.95	1	7	1	99	0.00	0.0	13.321	0	0	0	2	2	L	
L C07525	C07468	A	2ACSR	6.99Y	116.5	0.00	9.48	3.24	2	23	3	99	0.00	0.0	12.682	0	0	0	2	2	L	
L C07734	CO-1505383493	A	2ACSR	6.99Y	116.5	0.00	9.45	9.41	5	65	8	99	0.00	0.0	12.538	0	0	0	0	13	L	
L C07736	C07734	A	2ACSR	6.99Y	116.5	0.00	9.45	6.24	3	43	5	99	0.00	0.0	12.567	0	0	0	3	13	L	
L C07735	C07736	A	2ACSR	6.99Y	116.5	0.00	9.46	2.89	2	20	2	100	0.00	0.0	12.672	0	0	0	2	10	L	
L C07773	C07735	A	2ACSR	6.99Y	116.5	0.00	9.47	1.92	1	13	2	99	0.00	0.0	12.759	0	0	0	3	6	L	
L C07772	C07773	A	2ACSR	6.99Y	116.5	0.00	9.47	1.92	1	13	2	99	0.00	0.0	12.823	0	0	0	1	3	L	
L C07738	C07772	A	2ACSR	6.99Y	116.5	0.00	9.47	1.28	1	9	1	99	0.00	0.0	12.845	0	0	0	1	1	L	
L CO-107996170	C07738	A	2ACSR	6.99Y	116.5	0.00	9.47	0.00	0	0	0	100	0.00	0.0	12.882	0	0	0	0	0	L	
L C07524	C07772	A	2ACSR	6.99Y	116.5	0.00	9.47	0.64	0	4	1	97	0.00	0.0	12.871	0	0	0	1	1	L	
L C08370	C07735	A	2ACSR	6.99Y	116.5	0.00	9.46	0.44	0	3	0	100	0.00	0.0	12.738	0	0	0	2	2	L	

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total			
KW	22516	534	0	0	0	0	428	0.00	23478	Lowest Voltage = 116.43 on Element C07526		
KVAR	3869	103	-1620	-69	0	0	783		3066	Max Accm VoltD = 9.56 on Element C07526		
										Max Elem VoltD = 3.99 on Element RG1096431565		

Balanced Voltage Drop Report

Summary

Source: SNOW HILL

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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		Units Displayed In Volts													-----Element-----					
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
SNOW HILL		ABC	SNOW HILL	15.11Y	125.9	0.00	0.00	252.07	0	10941	3321	96	0.00	0.0	0.000	0	0	0	0	2108
----- Feeder No. 0 (Doyle Pike) Beginning with Device OC405933875 -----																				
----- Feeder No. 0 (Piqua) Beginning with Device OC1716299560 -----																				
----- Feeder No. 0 (Fairview) Beginning with Device OC1532696234 -----																				
----- Feeder No. 0 (Bluelicks) Beginning with Device OC1619264157 -----																				
L CO14061	CO14060	C	4ACSR	14.03Y	116.9	0.07	9.02	23.99	17	320	106	95	0.19	0.0	15.439	0	0	0	1	60 L
L CO14025	CO14061	C	4ACSR	14.03Y	116.9	0.00	9.03	4.22	3	56	19	95	0.00	0.0	15.486	0	0	0	0	3 L
L CO14026	CO14025	C	4ACSR	14.03Y	116.9	0.00	9.03	4.22	3	56	19	95	0.00	0.0	15.524	0	0	0	1	3 L
L CO14062	CO14026	C	4ACSR	14.03Y	116.9	0.00	9.03	2.15	2	29	10	95	0.00	0.0	15.571	0	0	0	2	2 L
L CO14134	CO14061	C	4ACSR	14.03Y	116.9	0.00	9.02	19.76	14	263	88	95	0.00	0.0	15.445	0	0	0	0	56 L
L OC397	CO14134	C	25 H OCR	14.03Y	116.9	0.00	9.02	19.76	79	263	88	95	0.00	0.0	15.445	0	0	0	0	56 L
L CO14135	OC397	C	4ACSR	14.03Y	116.9	0.04	9.07	18.52	13	247	82	95	0.08	0.0	15.548	0	0	0	2	46 L
L CO14100	CO14135	C	4ACSR	14.02Y	116.8	0.02	9.10	18.52	13	247	82	95	0.05	0.0	15.609	0	0	0	1	44 L
L CO14132	CO14100	C	2ACSR	14.02Y	116.8	0.00	9.10	0.00	0	0	0	100	0.00	0.0	15.694	0	0	0	0	1 L
L CO14133	CO14132	C	2ACSR	14.02Y	116.8	0.00	9.10	0.00	0	0	0	100	0.00	0.0	15.761	0	0	0	1	1 L
L CO13953	CO14100	C	4ACSR	14.02Y	116.8	0.00	9.10	0.61	0	8	3	94	0.00	0.0	15.676	0	0	0	1	1 L
L CO17152	CO14100	C	4ACSR	14.02Y	116.8	0.04	9.14	17.91	13	238	79	95	0.09	0.0	15.723	0	0	0	2	41 L
L CO13723	CO17152	C	4ACSR	14.02Y	116.8	0.00	9.14	0.00	0	0	0	100	0.00	0.0	16.054	0	0	0	2	2 L
L CO13756	CO17152	C	4ACSR	14.02Y	116.8	0.01	9.16	17.73	13	236	78	95	0.03	0.0	15.764	0	0	0	1	37 L
L CO13757	CO13756	C	4ACSR	14.01Y	116.7	0.05	9.22	16.89	12	225	75	95	0.10	0.0	15.912	0	0	0	3	36 L
L CO13724	CO13757	C	4ACSR	14.01Y	116.7	0.00	9.22	0.73	1	10	3	96	0.00	0.0	15.950	0	0	0	1	1 L
L CO13741	CO13757	C	4ACSR	14.00Y	116.7	0.05	9.27	15.38	11	205	68	95	0.08	0.0	16.054	0	0	0	2	32 L
L CO13740	CO13741	C	4ACSR	14.00Y	116.7	0.02	9.29	14.59	10	194	64	95	0.03	0.0	16.116	0	0	0	0	30 L
L CO13714	CO13740	C	4ACSR	13.99Y	116.6	0.03	9.33	13.25	9	176	59	95	0.05	0.0	16.239	0	0	0	0	28 L
L CO13751	CO13714	C	4ACSR	13.99Y	116.6	0.00	9.33	1.72	1	23	8	94	0.00	0.0	16.334	0	0	0	2	3 L
L CO13750	CO13751	C	4ACSR	13.99Y	116.6	0.00	9.34	0.77	1	10	3	96	0.00	0.0	16.409	0	0	0	1	1 L
L CO13758	CO13714	C	4ACSR	13.99Y	116.6	0.03	9.37	11.52	8	153	51	95	0.04	0.0	16.375	0	0	0	1	25 L
L CO13759	CO13758	C	4ACSR	13.99Y	116.5	0.03	9.40	11.52	8	153	51	95	0.04	0.0	16.504	0	0	0	0	24 L
L CO13712	CO13759	C	4ACSR	13.98Y	116.5	0.01	9.42	11.52	8	153	51	95	0.02	0.0	16.570	0	0	0	0	24 L
L CO13711	CO13712	C	4ACSR	13.98Y	116.5	0.00	9.42	1.78	1	24	8	95	0.00	0.0	16.684	0	0	0	0	4 L
L CO13715	CO13711	C	4ACSR	13.98Y	116.5	0.00	9.43	0.26	0	4	1	97	0.00	0.0	16.779	0	0	0	1	1 L
L CO13732	CO13711	C	4ACSR	13.98Y	116.5	0.00	9.43	1.51	1	20	7	94	0.00	0.0	16.760	0	0	0	1	3 L
L CO13731	CO13732	C	4ACSR	13.98Y	116.5	0.01	9.44	1.25	1	17	6	94	0.00	0.0	17.101	0	0	0	1	2 L
L CO13730	CO13731	C	4ACSR	13.98Y	116.5	0.00	9.44	0.00	0	0	0	100	0.00	0.0	17.321	0	0	0	0	1 L
L CO13717	CO13730	C	4ACSR	13.98Y	116.5	0.00	9.44	0.00	0	0	0	100	0.00	0.0	17.624	0	0	0	1	1 L
L CO13718	CO13730	C	4ACSR	13.98Y	116.5	0.00	9.44	0.00	0	0	0	100	0.00	0.0	17.671	0	0	0	0	0 L
L CO13760	CO13712	C	4ACSR	13.98Y	116.5	0.04	9.46	9.73	7	129	43	95	0.04	0.0	16.753	0	0	0	3	20 L
L CO13761	CO13760	C	4ACSR	13.98Y	116.5	0.02	9.49	8.06	6	107	36	95	0.02	0.0	16.902	0	0	0	0	17 L
L CO13762	CO13761	C	4ACSR	13.97Y	116.4	0.01	9.51	6.97	5	93	31	95	0.01	0.0	17.024	0	0	0	1	15 L
L CO13763	CO13762	C	4ACSR	13.97Y	116.4	0.01	9.52	6.01	4	80	26	95	0.00	0.0	17.110	0	0	0	1	14 L
L CO13764	CO13763	C	4ACSR	13.97Y	116.4	0.00	9.52	0.05	0	1	0	100	0.00	0.0	17.155	0	0	0	2	5 L
L CO13765	CO13764	C	4ACSR	13.97Y	116.4	0.00	9.52	0.00	0	0	0	100	0.00	0.0	17.232	0	0	0	1	3 L
L CO13766	CO13765	C	4ACSR	13.97Y	116.4	0.00	9.52	0.00	0	0	0	100	0.00	0.0	17.291	0	0	0	1	2 L
L CO13767	CO13766	C	4ACSR	13.97Y	116.4	0.00	9.52	0.00	0	0	0	100	0.00	0.0	17.375	0	0	0	1	1 L
L CO13716	CO13763	C	4ACSR	13.97Y	116.4	0.00	9.52	0.00	0	0	0	100	0.00	0.0	17.186	0	0	0	0	0 L
L CO420891903	CO13763	C	2ACSR	13.97Y	116.4	0.00	9.53	5.83	3	77	26	95	0.00	0.0	17.160	0	0	0	0	8 L
L CO-54596180	CO420891903	C	2ACSR	13.97Y	116.4	0.00	9.53	4.89	3	65	22	95	0.00	0.0	17.186	0	0	0	0	7 L
L CO13768	CO-54596180	C	4ACSR	13.97Y	116.4	0.00	9.53	4.89	3	65	22	95	0.00	0.0	17.200	0	0	0	1	7 L
L CO13769	CO13768	C	4ACSR	13.97Y	116.4	0.00	9.54	4.46	3	59	20	95	0.00	0.0	17.262	0	0	0	1	6 L
L CO13770	CO13769	C	4ACSR	13.97Y	116.4	0.00	9.54	3.55	3	47	16	95	0.00	0.0	17.318	0	0	0	1	5 L
L CO-26786578	CO13770	C	4ACSR	13.97Y	116.4	0.00	9.54	3.42	2	45	15	95	0.00	0.0	17.337	0	0	0	0	4 L
L CO-575413345	CO-26786578	C	4ACSR	13.97Y	116.4	0.00	9.54	0.89	1	12	4	95	0.00	0.0	17.414	0	0	0	1	1 L
L CO860588340	CO-26786578	C	4ACSR	13.97Y	116.4	0.00	9.55	2.53	2	34	11	95	0.00	0.0	17.413	0	0	0	0	3 L
L CO14008	CO860588340	C	4ACSR	13.97Y	116.4	0.00	9.55	2.53	2	34	11	95	0.00	0.0	17.470	0	0	0	1	3 L
L CO14009	CO14008	C	4ACSR	13.97Y	116.4	0.00	9.55	1.18	1	16	5	95	0.00	0.0	17.536	0	0	0	0	2 L
L CO14010	CO14009	C	4ACSR	13.97Y	116.4	0.00	9.55	1.18	1	16	5	95	0.00	0.0	17.583	0	0	0	1	2 L
L CO1661661154	CO14010	C	2ACSR	13.97Y	116.4	0.00	9.55	0.00	0	0	0	100	0.00	0.0	17.657	0	0	0	0	1 L
L CO-2142403068	CO1661661154	C	2ACSR	13.97Y	116.4	0.00	9.55	0.00	0	0	0	100	0.00	0.0	17.722	0	0	0	0	1 L
L CO-761002848	CO-2142403068	C	2ACSR	13.97Y	116.4	0.00	9.55	0.00	0	0	0	100	0.00	0.0	17.787	0	0	0	1	1 L
L CO17097	CO13770	C	4ACSR	13.97Y	116.4	0.00	9.54	0.00	0	0	0	100	0.00	0.0	17.583	0	0	0	0	0 L
L CO13993	CO17097	C	4ACSR	13.97Y	116.4	0.00	9.54	0.00	0	0	0	100	0.00	0.0	17.782	0	0	0	0	0 L
L CO1725692363	CO420891903	C	2ACSR	13.97Y	116.4	0.00	9.53	0.93	1	12	4	95	0.00	0.0	17.294	0	0	0	1	1 L
L CO13743	CO13761	C	4ACSR	13.98Y	116.5	0.00	9.4													

Balanced Voltage Drop Report
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Summary

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW	Element KVAR	Cons On	Cons Thru	
L C014031	C014095	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	15.996	0	0	0	0	6	L
L C014032	C014031	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.128	0	0	0	0	6	L
L C014033	C014032	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.280	0	0	0	0	4	L
L C014034	C014033	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.355	0	0	0	0	4	L
L C014076	C014034	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.420	0	0	0	1	4	L
L C014077	C014076	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.431	0	0	0	0	3	L
L C014035	C014077	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.447	0	0	0	0	3	L
L C013962	C014035	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.480	0	0	0	2	2	L
L C013963	C014035	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.516	0	0	0	1	1	L
L C013935	C014032	C	4ACSR	14.03Y	116.9	0.00	9.03	0.00	0	0	0	100	0.00	0.0	16.213	0	0	0	2	2	L
L C014126	AU26	A	4ACSR	6.90Y	115.1	0.02	10.87	88.95	64	580	203	94	0.12	0.0	14.091	0	0	0	0	117	L
L OC404	C014126	A	50 H OCR	6.90Y	115.1	0.00	10.87	88.95	178	580	203	94	0.00	0.0	14.091	0	0	0	0	117	L
L C014127	OC404	A	4ACSR	6.88Y	114.8	0.28	11.16	88.95	64	580	203	94	1.35	0.2	14.160	0	0	0	5	117	L
L C014103	C014127	A	4ACSR	6.87Y	114.5	0.29	11.46	88.43	63	575	201	94	1.37	0.2	14.231	0	0	0	1	112	L
L C014104	C014103	A	4ACSR	6.86Y	114.3	0.13	11.60	85.87	61	557	195	94	0.62	0.1	14.266	0	0	0	1	110	L
L C013615	C013698	A	4ACSR	7.01Y	116.8	0.23	9.15	48.86	35	325	110	95	0.61	0.1	17.407	0	0	0	0	54	L
L C013614	C013615	A	4ACSR	6.99Y	116.6	0.21	9.36	48.86	35	325	109	95	0.56	0.1	17.501	0	0	0	2	54	L
L C013613	C013614	A	4ACSR	6.98Y	116.3	0.23	9.60	48.81	35	324	109	95	0.60	0.1	17.604	0	0	0	1	52	L
L C013544	C013613	A	4ACSR	6.97Y	116.2	0.10	9.70	48.09	34	318	107	95	0.26	0.0	17.650	0	0	0	0	49	L
L C013616	C013544	A	4ACSR	6.97Y	116.2	0.05	9.76	48.09	34	318	107	95	0.14	0.0	17.675	0	0	0	0	49	L
L C013617	C013616	A	4ACSR	6.96Y	116.1	0.09	9.85	47.07	34	311	104	95	0.22	0.0	17.716	0	0	0	0	48	L
L C013618	C013617	A	4ACSR	6.95Y	115.9	0.22	10.07	47.07	34	311	104	95	0.56	0.1	17.818	0	0	0	0	48	L
L C013543	C013618	A	4ACSR	6.95Y	115.9	0.01	10.09	1.57	1	10	3	96	0.00	0.0	17.961	0	0	0	2	5	L
L C013571	C013543	A	4ACSR	6.95Y	115.9	0.00	10.09	0.00	0	0	0	100	0.00	0.0	18.197	0	0	0	1	1	L
L C013590	C013543	A	4ACSR	6.95Y	115.9	0.00	10.09	1.43	1	9	3	95	0.00	0.0	18.046	0	0	0	2	2	L
L C013686	C013618	A	4ACSR	6.94Y	115.7	0.14	10.22	45.50	33	300	101	95	0.34	0.1	17.886	0	0	0	2	43	L
L C013687	C013686	A	4ACSR	6.92Y	115.4	0.32	10.54	42.82	31	282	95	95	0.72	0.2	18.046	0	0	0	1	41	L
L C017098	C013687	A	4ACSR	6.91Y	115.1	0.28	10.82	40.53	29	266	89	95	0.60	0.2	18.194	0	0	0	0	40	L
L C013771	C017098	A	4ACSR	6.90Y	115.1	0.03	10.85	38.53	28	253	84	95	0.06	0.0	18.212	0	0	0	1	39	L
L C013772	C013771	A	4ACSR	6.89Y	114.9	0.17	11.03	36.93	26	242	81	95	0.33	0.1	18.311	0	0	0	2	38	L
L C013773	C013772	A	4ACSR	6.89Y	114.9	0.05	11.08	34.29	24	224	75	95	0.10	0.0	18.346	0	0	0	1	36	L
L C013774	C013773	A	4ACSR	6.88Y	114.7	0.19	11.28	31.25	22	204	68	95	0.32	0.1	18.481	0	0	0	1	35	L
L C013775	C013774	A	4ACSR	6.86Y	114.4	0.24	11.52	30.41	22	199	66	95	0.39	0.1	18.652	0	0	0	3	33	L
L C013776	C013775	A	4ACSR	6.86Y	114.4	0.04	11.57	25.87	18	169	56	95	0.06	0.0	18.690	0	0	0	0	30	L
L C013747	C013776	A	4ACSR	6.86Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	18.765	0	0	0	0	1	L
L C013746	C013747	A	4ACSR	6.86Y	114.4	0.00	11.57	0.00	0	0	0	100	0.00	0.0	18.898	0	0	0	1	1	L
L C013733	C013776	A	4ACSR	6.85Y	114.2	0.16	11.73	25.87	18	169	56	95	0.22	0.1	18.822	0	0	0	0	27	L
L C013777	C013733	A	4ACSR	6.85Y	114.1	0.09	11.82	22.16	16	144	48	95	0.10	0.0	18.911	0	0	0	1	26	L
L C013778	C013777	A	4ACSR	6.84Y	114.0	0.11	11.93	19.34	14	126	42	95	0.11	0.0	19.033	0	0	0	1	25	L
L C013779	C013778	A	4ACSR	6.83Y	113.9	0.07	12.01	18.54	13	120	40	95	0.07	0.0	19.125	0	0	0	0	24	L
L C013720	C013779	A	4ACSR	6.83Y	113.9	0.00	12.02	0.71	1	5	2	93	0.00	0.0	19.352	0	0	0	2	2	L
L C013734	C013779	A	4ACSR	6.83Y	113.9	0.03	12.05	2.71	2	18	6	95	0.00	0.0	19.381	0	0	0	1	3	L
L C013780	C013734	A	4ACSR	6.83Y	113.9	0.00	12.05	1.05	1	7	2	96	0.00	0.0	19.436	0	0	0	1	2	L
L C013781	C013780	A	4ACSR	6.83Y	113.9	0.00	12.06	1.02	1	7	2	96	0.00	0.0	19.570	0	0	0	1	1	L
L C013713	C013779	A	4ACSR	6.82Y	113.8	0.16	12.17	15.12	11	98	33	95	0.12	0.1	19.352	0	0	0	0	19	L
L C013735	C013713	A	4ACSR	6.82Y	113.8	0.01	12.19	13.60	10	88	29	95	0.01	0.0	19.377	0	0	0	1	18	L
L C013782	C013735	A	4ACSR	6.82Y	113.7	0.05	12.24	12.06	9	78	26	95	0.03	0.0	19.472	0	0	0	1	15	L
L C013783	C013782	A	4ACSR	6.82Y	113.6	0.07	12.32	11.41	8	74	25	95	0.04	0.0	19.617	0	0	0	0	14	L
L C013736	C013783	A	4ACSR	6.81Y	113.5	0.10	12.42	11.41	8	74	25	95	0.06	0.0	19.807	0	0	0	1	13	L
L C013784	C013736	A	4ACSR	6.80Y	113.4	0.11	12.54	11.41	8	74	25	95	0.06	0.0	20.016	0	0	0	2	12	L
L C013785	C013784	A	4ACSR	6.80Y	113.3	0.11	12.65	8.79	6	57	19	95	0.05	0.0	20.287	0	0	0	2	10	L
L C013786	C013785	A	4ACSR	6.79Y	113.3	0.03	12.68	7.46	5	48	16	95	0.01	0.0	20.375	0	0	0	0	8	L
L C013787	C013786	A	4ACSR	6.79Y	113.3	0.01	12.69	6.29	4	41	13	95	0.00	0.0	20.414	0	0	0	1	6	L
L C013788	C013787	A	4ACSR	6.79Y	113.2	0.01	12.70	3.04	2	20	7	94	0.00	0.0	20.489	0	0	0	1	5	L
L C013739	C013788	A	4ACSR	6.79Y	113.2	0.00	12.71	1.79	1	12	4	95	0.00	0.0	20.578	0	0	0	0	4	L
L C013738	C013739	A	4ACSR	6.79Y	113.2	0.01	12.72	1.79	1	12	4	95	0.00	0.0	20.735	0	0	0	0	3	L
L C013755	C013738	A	4ACSR	6.79Y	113.2	0.00	12.72	0.20	0	1	0	100	0.00	0.0	20.855	0	0	0	0	2	L
L C013754	C013755	A	4ACSR	6.79Y	113.2	0.00	12.72	0.20	0	1	0	100	0.00	0.0	20.874	0	0	0	2	2	L
L C013737	C013738	A	4ACSR	6.79Y	113.2	0.00	12.73	1.59	1	10	3	96	0.00	0.0	20.810	0	0	0	1	1	L
L C013728	C013739	A	2ACSR	6.79Y	113.2	0.00	12.71	0.00	0	0	0	100	0.00	0.0	20.621	0	0	0	1	1	L
L C013749	C013786	A	4ACSR	6.79Y	113.3	0.00	12.68	1.17	1	8	3	94	0.00	0.0	20.441	0	0	0	1	2	L
L C013748	C013749	A	4ACSR	6.79Y	113.3	0.00	12.68	0.03	0	0	0	100	0.00	0.0	20.520	0	0	0	1	1	L
L C013721	C013783	A	4ACSR	6.82Y	113.6	0.00	12.32	0.00	0	0	0	100	0.00	0.0	19.807	0	0	0	1	1	L
L C013727	C013735	A	2ACSR	6.82Y	113.7	0.00	12.20	1.10	1	7	2	96	0.00	0.0	19.524	0	0	0	1	2	L
L C01841925335	C013727	A	2ACSR	6.82Y	113.7	0.00	12.20	0.00	0	0	0	100	0.00	0.0	19.556	0	0	0	0	0	L
L C01666341963	C013727	A	2ACSR	6.82Y	113.7	0.00	12.20	0.19	0	1	0	100	0.00								

Balanced Voltage Drop Report
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Summary

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		Units Displayed In Volts													-----Element-----						
		-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru	
L C014049	C014103	A	2ACSR	6.87Y	114.5	0.00	11.46	1.44	1	9	3	95	0.00	0.0	14.270	0	0	0	0	1	L
L C014050	C014049	A	2ACSR	6.87Y	114.5	0.00	11.46	1.44	1	9	3	95	0.00	0.0	14.337	0	0	0	0	1	L
L C011614	OH360439001	C	4ACSR	7.01Y	116.8	0.47	9.13	58.94	42	392	137	94	1.46	0.3	11.676	0	0	0	3	56	L
L C011615	C011614	C	4ACSR	6.99Y	116.6	0.22	9.36	54.04	39	358	125	94	0.65	0.1	11.766	0	0	0	1	49	L
L C011616	C011615	C	4ACSR	6.98Y	116.4	0.22	9.58	52.60	38	347	122	94	0.62	0.1	11.857	0	0	0	0	48	L
L C011617	C011616	C	4ACSR	6.97Y	116.2	0.18	9.77	52.60	38	347	121	94	0.51	0.1	11.931	0	0	0	3	48	L
L C011626	C011617	C	4ACSR	6.97Y	116.1	0.04	9.82	13.88	10	92	31	95	0.03	0.0	12.007	0	0	0	2	9	L
L C011627	C011626	C	4ACSR	6.96Y	116.1	0.01	9.83	10.43	7	69	23	95	0.00	0.0	12.035	0	0	0	1	7	L
L C011655	C011627	C	4ACSR	6.96Y	116.1	0.02	9.86	7.13	5	47	16	95	0.00	0.0	12.106	0	0	0	2	5	L
L C011656	C011655	C	4ACSR	6.96Y	116.1	0.00	9.86	4.77	3	32	10	95	0.00	0.0	12.149	0	0	0	1	3	L
L C011585	C011656	C	4ACSR	6.96Y	116.1	0.01	9.88	2.55	2	17	6	94	0.00	0.0	12.243	0	0	0	1	1	L
L C011586	C011656	C	4ACSR	6.96Y	116.1	0.00	9.86	0.00	0	0	0	100	0.00	0.0	12.225	0	0	0	1	1	L
L C0441267905	C011627	C	2ACSR	6.96Y	116.1	0.00	9.83	0.00	0	0	0	100	0.00	0.0	12.114	0	0	0	1	1	L
L C011562	C011617	C	4ACSR	6.95Y	115.9	0.26	10.04	37.59	27	247	88	94	0.53	0.2	12.083	0	0	0	3	36	L
L C011563	C011562	C	4ACSR	6.95Y	115.8	0.11	10.15	33.24	24	218	78	94	0.20	0.0	12.158	0	0	0	0	27	L
L C011618	C011563	C	4ACSR	6.93Y	115.5	0.30	10.46	29.24	21	191	69	94	0.46	0.2	12.376	0	0	0	0	22	L
L C011619	C011618	C	4ACSR	6.92Y	115.4	0.04	10.50	29.24	21	191	69	94	0.07	0.0	12.409	0	0	0	0	22	L
L C011620	C011619	C	4ACSR	6.92Y	115.4	0.01	10.51	29.24	21	191	69	94	0.01	0.0	12.417	0	0	0	1	22	L
L C011582	C011620	C	4ACSR	6.92Y	115.4	0.02	10.53	3.27	2	22	7	95	0.00	0.0	12.569	0	0	0	4	4	L
L C011653	C011620	C	4ACSR	6.92Y	115.3	0.12	10.64	24.30	17	158	58	94	0.16	0.1	12.527	0	0	0	2	17	L
L C0780471879	C011653	C	2ACSR	6.92Y	115.3	0.01	10.65	22.10	12	143	53	94	0.01	0.0	12.544	0	0	0	0	15	L
L CO-1129549170	C0780471879	C	2ACSR	6.91Y	115.3	0.02	10.67	21.20	12	137	51	94	0.02	0.0	12.573	0	0	0	0	14	L
L C011666	CO-1129549170	C	4ACSR	6.91Y	115.2	0.07	10.75	19.68	14	127	48	94	0.07	0.0	12.655	0	0	0	2	13	L
L C011671	C011666	C	4ACSR	6.90Y	115.1	0.09	10.84	17.47	12	113	43	93	0.08	0.0	12.768	0	0	0	1	11	L
L C011672	C011671	C	4ACSR	6.90Y	115.1	0.02	10.86	15.16	11	98	38	93	0.01	0.0	12.800	0	0	0	0	10	L
L C011621	C011672	C	4ACSR	6.90Y	115.1	0.01	10.88	15.16	11	98	38	93	0.01	0.0	12.818	0	0	0	2	10	L
L C011580	C011621	C	4ACSR	6.90Y	115.1	0.00	10.88	0.73	1	5	2	93	0.00	0.0	12.884	0	0	0	1	1	L
L C011622	C011621	C	4ACSR	6.90Y	115.0	0.10	10.98	10.25	7	65	27	92	0.05	0.0	13.028	0	0	0	0	7	L
L C011623	C011622	C	4ACSR	6.89Y	114.9	0.03	11.02	10.25	7	65	27	92	0.02	0.0	13.109	0	0	0	1	7	L
L C011624	C011623	C	4ACSR	6.89Y	114.9	0.04	11.06	9.89	7	63	27	92	0.02	0.0	13.204	0	0	0	0	6	L
L C011625	C011624	C	4ACSR	6.89Y	114.8	0.03	11.10	9.89	7	63	26	92	0.01	0.0	13.279	0	0	0	0	6	L
L C011699	C011625	C	4ACSR	6.88Y	114.7	0.11	11.21	9.89	7	63	26	92	0.05	0.0	13.516	0	0	0	0	6	L
L C011700	C011699	C	4ACSR	6.88Y	114.7	0.04	11.26	9.89	7	63	26	92	0.02	0.0	13.620	0	0	0	0	6	L
L C011681	C011700	C	4ACSR	6.88Y	114.6	0.05	11.31	9.89	7	63	26	92	0.02	0.0	13.731	0	0	0	0	6	L
L C011682	C011681	C	4ACSR	6.87Y	114.6	0.02	11.34	9.60	7	61	26	92	0.01	0.0	13.791	0	0	0	1	5	L
L C011685	C011682	C	4ACSR	6.87Y	114.6	0.03	11.37	8.61	6	54	24	91	0.01	0.0	13.877	0	0	0	0	4	L
L C011589	C011685	C	2ACSR	6.87Y	114.6	0.00	11.37	0.04	0	0	0	100	0.00	0.0	13.907	0	0	0	1	1	L
L C011686	C011685	C	4ACSR	6.87Y	114.6	0.02	11.39	8.56	6	54	24	91	0.00	0.0	13.926	0	0	0	1	3	L
L C011673	C011686	C	4ACSR	6.87Y	114.5	0.01	11.40	8.56	6	54	24	91	0.00	0.0	13.952	0	0	0	1	2	L
L C011678	C011673	C	1/OPRIURD	6.87Y	114.5	0.00	11.41	2.02	1	13	4	96	0.00	0.0	14.097	0	0	0	1	1	L
L C011588	C011681	C	2ACSR	6.88Y	114.6	0.00	11.31	0.29	0	2	1	89	0.00	0.0	13.764	0	0	0	1	1	L
L C011581	CO-1129549170	C	4ACSR	6.91Y	115.3	0.00	10.68	1.51	1	10	3	96	0.00	0.0	12.639	0	0	0	1	1	L
L CO-397037819	C0780471879	C	2ACSR	6.92Y	115.3	0.00	10.65	0.21	0	1	0	100	0.00	0.0	12.608	0	0	0	1	1	L
L C011657	C011563	C	4ACSR	6.94Y	115.8	0.01	10.17	4.00	3	26	9	94	0.00	0.0	12.265	0	0	0	3	5	L
L C017205	C011657	C	4ACSR	6.94Y	115.8	0.01	10.19	1.58	1	10	3	96	0.00	0.0	12.414	0	0	0	2	2	L
L C011583	C011562	C	4ACSR	6.95Y	115.9	0.00	10.05	2.86	2	19	6	95	0.00	0.0	12.149	0	0	0	3	3	L
L C011584	C011562	C	4ACSR	6.95Y	115.9	0.00	10.04	1.15	1	8	3	94	0.00	0.0	12.196	0	0	0	3	3	L
L C011658	C011614	C	4ACSR	7.01Y	116.8	0.00	9.14	2.64	2	18	6	95	0.00	0.0	11.727	0	0	0	2	4	L
L C011659	C011658	C	4ACSR	7.01Y	116.8	0.00	9.14	2.40	2	16	5	95	0.00	0.0	11.782	0	0	0	1	2	L
L C011641	C011659	C	4ACSR	7.01Y	116.8	0.00	9.15	1.54	1	10	3	96	0.00	0.0	11.839	0	0	0	1	1	L
L C014325	C017161	B	4ACSR	7.01Y	116.9	0.23	9.09	33.49	24	223	74	95	0.42	0.1	10.462	0	0	0	1	76	L
L C014347	C014325	B	4ACSR	7.01Y	116.9	0.00	9.09	0.00	0	0	0	100	0.00	0.0	10.765	0	0	0	1	1	L
L C014324	C014325	B	4ACSR	6.99Y	116.6	0.23	9.33	33.19	24	221	73	95	0.41	0.1	10.614	0	0	0	0	74	L
L C014348	C014324	B	4ACSR	6.99Y	116.6	0.00	9.33	0.46	0	3	1	95	0.00	0.0	10.699	0	0	0	1	1	L
L C014469	C014324	B	4ACSR	6.99Y	116.5	0.12	9.46	32.72	23	217	72	95	0.22	0.1	10.697	0	0	0	1	73	L
L C014470	C014469	B	4ACSR	6.98Y	116.4	0.13	9.59	32.49	23	216	71	95	0.22	0.1	10.785	0	0	0	1	72	L
L C014468	C014470	B	4ACSR	6.97Y	116.2	0.15	9.75	31.91	23	212	70	95	0.26	0.1	10.889	0	0	0	0	70	L
L C014523	C014468	B	4ACSR	6.96Y	116.1	0.09	9.84	31.91	23	211	70	95	0.16	0.0	10.955	0	0	0	0	70	L
L C014466	C014523	B	2ACSR	6.96Y	116.0	0.07	9.92	30.07	17	199	66	95	0.11	0.0	11.033	0	0	0	0	68	L
L C014467	C014466	B	2ACSR	6.96Y	116.0	0.03	9.96	30.07	17	199	66	95	0.05	0.0	11.070	0	0	0	0	68	L
L C014465	C014467	B	2ACSR	6.95Y	115.9	0.08	10.04	30.07	17	199	66	95	0.11	0.0	11.151	0	0	0	0	68	L
L C014464	C014465	B	2ACSR	6.95Y	115.9	0.00	10.04	0.02	0	0	0	100	0.00	0.0	11.218	0	0	0	1	1	L
L CO-1564012935	C014465	B	2ACSR	6.94Y	115.7	0.25	10.29	30.04	17	199	65	95	0.37	0.1	11.406	0	0	0	1	67	L
L CO713604796	CO-1564012935	B	2ACSR	6.94Y	115.6	0.02	10.32	29.76	17	196	64	95	0.03	0.0	11.428	0	0	0	0	65	L
L SW360219006	CO713604796	B	Closed	6.94Y	115.6	0.00	10.32	29.76	0	196	64	95	0.00	0.0	11.428	0	0	0	0	65	L
L SW360219007	SW360219006	B	Closed	6.94Y	11																

Balanced Voltage Drop Report
Source: SNOW HILL

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

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Units Displayed In Volts																						
-Base Voltage:120.0-																						
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru			
L C011741	C011701	B	6ACWC	6.88Y	114.8	0.04	11.18	24.37	17	160	52	95	0.06	0.0	12.137	0	0	0	1	55	L	
L SW360209002	C011741	B	Closed	6.88Y	114.8	0.00	11.18	24.37	0	160	52	95	0.00	0.0	12.137	0	0	0	0	0	54	L
L SW360209001	SW360209002	B	Closed	6.88Y	114.8	0.00	11.18	24.37	0	160	52	95	0.00	0.0	12.137	0	0	0	0	0	54	L
L OH360209003	SW360209001	B	6ACWC	6.88Y	114.7	0.06	11.25	24.37	17	160	52	95	0.08	0.0	12.199	0	0	0	0	0	54	L
L C011802	OH360209003	B	6ACWC	6.88Y	114.7	0.02	11.27	23.39	17	153	50	95	0.02	0.0	12.220	0	0	0	1	54	L	
L C011801	C011802	B	6ACWC	6.88Y	114.7	0.00	11.28	23.39	17	153	50	95	0.00	0.0	12.226	0	0	0	0	0	53	L
L C011799	C011801	B	6ACWC	6.88Y	114.7	0.00	11.29	22.15	16	145	47	95	0.00	0.0	12.234	0	0	0	0	0	53	L
L OC327	C011799	B	15 H OCR	6.88Y	114.7	0.00	11.29	22.15	148	145	47	95	0.00	0.0	12.234	0	0	0	0	0	53	L
L C011800	OC327	B	6ACWC	6.87Y	114.6	0.06	11.35	22.15	16	145	47	95	0.07	0.0	12.294	0	0	0	3	53	L	
L C011777	C011800	B	6ACWC	6.87Y	114.5	0.11	11.46	22.10	16	145	47	95	0.13	0.0	12.404	0	0	0	1	50	L	
L C011776	C011777	B	6ACWC	6.87Y	114.5	0.01	11.48	21.60	15	141	46	95	0.02	0.0	12.422	0	0	0	0	0	49	L
L C011775	C011776	B	6ACWC	6.86Y	114.3	0.12	11.60	21.60	15	141	46	95	0.14	0.0	12.545	0	0	0	0	0	49	L
L C011746	C011775	B	6ACWC	6.86Y	114.3	0.05	11.66	21.60	15	141	46	95	0.05	0.0	12.596	0	0	0	1	49	L	
L OH360209001	C011746	B	6ACWC	6.85Y	114.2	0.06	11.72	20.64	15	135	44	95	0.06	0.0	12.659	0	0	0	0	0	48	L
L C011745	OH360209001	B	6ACWC	6.85Y	114.1	0.08	11.80	17.95	13	117	38	95	0.08	0.0	12.761	0	0	0	2	46	L	
L C011747	C011745	B	6ACWC	6.84Y	114.1	0.02	11.83	16.64	12	108	35	95	0.02	0.0	12.797	0	0	0	1	41	L	
L C017228	C011747	B	6ACWC	6.84Y	114.0	0.15	11.98	16.56	12	108	35	95	0.13	0.1	12.997	0	0	0	0	0	40	L
L C014358	C017228	B	4ACSR	6.84Y	114.0	0.00	11.98	0.00	0	0	0	100	0.00	0.0	13.054	0	0	0	2	2	L	
L C017170	C017228	B	6ACWC	6.83Y	113.9	0.09	12.08	15.60	11	102	33	95	0.07	0.0	13.131	0	0	0	2	36	L	
L C016314	C017170	B	6ACWC	6.82Y	113.8	0.08	12.17	15.52	11	101	33	95	0.07	0.0	13.253	0	0	0	1	34	L	
L C016458	C016314	B	6ACWC	6.82Y	113.7	0.07	12.24	15.52	11	101	33	95	0.05	0.0	13.354	0	0	0	3	33	L	
L C016459	C016458	B	6ACWC	6.82Y	113.7	0.01	12.25	14.51	10	94	31	95	0.00	0.0	13.370	0	0	0	0	0	30	L
L SW250772004	C016459	B	Closed	6.82Y	113.7	0.00	12.25	5.50	0	36	12	95	0.00	0.0	13.370	0	0	0	0	0	10	L
L SW250772005	SW250772004	B	Closed	6.82Y	113.7	0.00	12.25	5.50	0	36	12	95	0.00	0.0	13.370	0	0	0	0	0	10	L
L CO42141389	SW250772005	B	2ACSR	6.82Y	113.7	0.01	12.27	5.50	3	36	12	95	0.00	0.0	13.472	0	0	0	0	0	10	L
L CO-530639886	CO42141389	B	2ACSR	6.82Y	113.7	0.00	12.27	4.71	3	31	10	95	0.00	0.0	13.516	0	0	0	1	10	L	
L CO-1182164857	CO-530639886	B	2ACSR	6.82Y	113.7	0.00	12.28	4.71	3	31	10	95	0.00	0.0	13.577	0	0	0	0	0	9	L
L CO2088357172	CO-1182164857	B	2ACSR	6.82Y	113.7	0.00	12.29	3.52	2	23	8	94	0.00	0.0	13.609	0	0	0	1	9	L	
L CO1862655166	CO2088357172	B	2ACSR	6.82Y	113.7	0.00	12.29	0.83	0	5	2	93	0.00	0.0	13.658	0	0	0	0	0	1	L
L C016457	CO1862655166	B	6ACWC	6.82Y	113.7	0.00	12.29	0.83	1	5	2	93	0.00	0.0	13.681	0	0	0	1	1	L	
L CO319200871	CO2088357172	B	2ACSR	6.82Y	113.7	0.00	12.29	2.69	1	17	6	94	0.00	0.0	13.633	0	0	0	0	0	7	L
L C016455	CO319200871	B	6ACWC	6.82Y	113.7	0.00	12.29	2.69	2	17	6	94	0.00	0.0	13.656	0	0	0	0	0	7	L
L C016454	C016455	B	6ACWC	6.82Y	113.6	0.00	12.30	2.35	2	15	5	95	0.00	0.0	13.698	0	0	0	1	7	L	
L C016453	C016454	B	6ACWC	6.82Y	113.6	0.00	12.31	1.76	1	11	4	94	0.00	0.0	13.812	0	0	0	1	6	L	
L C016451	C016453	B	6ACWC	6.82Y	113.6	0.00	12.31	1.08	1	7	2	96	0.00	0.0	13.859	0	0	0	0	0	4	L
L C016452	C016451	B	6ACWC	6.82Y	113.6	0.00	12.31	1.08	1	7	2	96	0.00	0.0	13.881	0	0	0	0	0	4	L
L C017231	C016452	B	6ACWC	6.82Y	113.6	0.00	12.31	0.39	0	3	1	95	0.00	0.0	14.105	0	0	0	3	3	L	
L CO2001466264	C016452	B	2ACSR	6.82Y	113.6	0.00	12.31	0.00	0	0	0	100	0.00	0.0	13.926	0	0	0	1	1	L	
L C016282	C016453	B	6ACWC	6.82Y	113.6	0.00	12.31	0.67	0	4	1	97	0.00	0.0	13.935	0	0	0	1	1	L	
L SW250772002	C016459	B	Closed	6.82Y	113.7	0.00	12.25	9.01	0	59	19	95	0.00	0.0	13.370	0	0	0	0	0	20	L
L SW250772001	SW250772002	B	Closed	6.82Y	113.7	0.00	12.25	9.01	0	59	19	95	0.00	0.0	13.370	0	0	0	0	0	20	L
L C016315	SW250772001	B	6ACWC	6.82Y	113.7	0.04	12.29	9.01	6	59	19	95	0.01	0.0	13.466	0	0	0	0	0	20	L
L C016285	C016315	B	6ACWC	6.82Y	113.7	0.00	12.29	0.00	0	0	0	100	0.00	0.0	13.521	0	0	0	1	1	L	
L CO-227915052	C016315	B	2ACSR	6.82Y	113.7	0.00	12.29	0.00	0	0	0	100	0.00	0.0	13.781	0	0	0	0	0	0	L
L C016316	C016315	B	6ACWC	6.81Y	113.6	0.08	12.38	9.01	6	59	19	95	0.04	0.0	13.677	0	0	0	0	0	19	L
L CO-1391645582	C016316	B	2ACSR	6.81Y	113.6	0.00	12.38	0.04	0	0	0	100	0.00	0.0	13.784	0	0	0	1	1	L	
L C016317	C016316	B	6ACWC	6.81Y	113.5	0.06	12.45	8.96	6	58	19	95	0.03	0.0	13.845	0	0	0	1	18	L	
L C016318	C016317	B	2ACSR	6.81Y	113.5	0.01	12.46	7.25	4	47	15	95	0.00	0.0	13.894	0	0	0	0	0	11	L
L C016271	C016318	B	6ACWC	6.81Y	113.5	0.02	12.48	7.25	5	47	15	95	0.00	0.0	13.970	0	0	0	2	11	L	
L C016288	C016271	B	6ACWC	6.81Y	113.5	0.00	12.49	1.94	1	13	4	96	0.00	0.0	14.055	0	0	0	1	1	L	
L C016268	C016271	B	6ACWC	6.80Y	113.4	0.01	12.50	3.16	2	21	6	96	0.00	0.0	14.083	0	0	0	2	8	L	
L C016269	C016268	B	6ACWC	6.80Y	113.4	0.01	12.52	2.45	2	16	5	95	0.00	0.0	14.235	0	0	0	0	0	5	L
L C016270	C016269	B	6ACWC	6.80Y	113.4	0.00	12.52	2.45	2	16	5	95	0.00	0.0	14.273	0	0	0	0	0	5	L
L C016325	C016270	B	6ACWC	6.80Y	113.4	0.00	12.52	0.80	1	5	2	93	0.00	0.0	14.350	0	0	0	2	2	L	
L C016326	C016325	B	6ACWC	6.80Y	113.4	0.00	12.53	0.72	1	5	2	93	0.00	0.0	14.386	0	0	0	0	0	2	L
L C016472	C016326	B	6ACWC	6.80Y	113.4	0.00	12.53	0.72	1	5	2	93	0.00	0.0	14.434	0	0	0	2	2	L	
L C016287	C016472	B	1/OPRIURD	6.80Y	113.4	0.00	12.53	0.92	1	6	1	99	0.00	0.0	14.470	0	0	0	1	1	L	
L C016289	C016287	B	6ACWC	6.80Y	113.4	0.00	12.50	0.02	0	0	0	100	0.00	0.0	14.159	0	0	0	1	1	L	
L C02101283083	C016317	B	2ACSR	6.81Y	113.5	0.00	12.45	0.52	0	3	1	95	0.00	0.0	13.864	0	0	0	2	2	L	
L C016319	C02101283083	B	6ACWC	6.81Y	113.5	0.00	12.45	1.18	1	8	3	94	0.00	0.0	13.929	0	0	0	0	0	4	L
L C016320	C016319	B	6ACWC	6.81Y	113.5	0.01	12.47	1.18	1	8	3	94	0.00	0.0	14.213	0	0	0	0	0	4	L
L C016321	C016320	B	6ACWC	6.81Y	113.5	0.00	12.47	1.18	1	8	3	94	0.00	0.0	14.374	0	0	0	1	2	L	
L C016322	C016321	B	6ACWC	6.81Y	113.5	0.00	12.48	0.41	0	3	1	95	0.00	0.0	14.488	0	0	0	0	0	1	L
L C016323	C016322	B	6ACWC	6.81Y	113.5	0.00	12.48	0.41	0	3	1	95	0.00	0.0	14.564	0	0	0	1	1	L	
L C016324	C016323	B	6ACWC	6.																		

Balanced Voltage Drop Report
Source: SNOW HILL

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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Units Displayed In Volts																			
-Base Voltage:120.0-																			
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----		
																Cons	Cons		
																On	Thru		
L CO1975085678	CO555388953	B	2ACSR	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	12.457	0	0	0	0
L CO14493	CO1975085678	B	6ACWC	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	12.702	0	0	0	0
L SW360209004	CO11801	B	Open	6.88Y	114.7	0.00	11.28	0.00	0	0	0	100	0.00	0.0	12.226	0	0	0	0
L CO11711	CO11779	B	4ACSR	6.93Y	115.5	0.00	10.46	0.00	0	0	0	100	0.00	0.0	11.629	0	0	0	0
L CO11780	CO-1564012935	B	4ACSR	6.94Y	115.6	0.00	10.30	0.27	0	2	1	89	0.00	0.0	11.481	0	0	0	1
L CO14524	CO14523	B	4ACSR	6.96Y	116.1	0.00	9.85	1.84	1	12	4	95	0.00	0.0	11.031	0	0	0	2
L CO14349	CO14470	B	4ACSR	6.98Y	116.4	0.00	9.59	0.57	0	4	1	97	0.00	0.0	10.841	0	0	0	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total		
KW	10473	93	0	0	0	0	375		0.00	10941	Lowest Voltage =	113.26 on Element CO13737
KVAR	3444	30	-614	-9	0	0	470			3321	Max Accm VoltD =	12.73 on Element CO13737
											Max Elem VoltD =	11.60 on Element REG96

Balanced Voltage Drop Report

Source: MAYSVILLE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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		Units Displayed In Volts													-----Element-----					
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
MAYSVILLE		ABC	MAYSVILLE	15.11Y	125.9	0.00	0.00	238.12	0	10217	3505	95	0.00	0.0	0.000	0	0	0	0	1007
----- Feeder No. 0 (Federal Mogal) Beginning with Device OC739 -----																				
P CO30683	CO23958	ABC	1/OAAC	15.10Y	125.8	0.01	0.10	24.33	10	680	868	62	0.07	0.0	0.842	0	0	0	0	40 P
P CO170561368	CO30683	ABC	2ACSR	15.10Y	125.8	0.01	0.12	22.10	12	577	819	58	0.11	0.0	0.898	0	0	0	0	15 P
P CO-1630019527	CO170561368	ABC	2ACSR	15.10Y	125.8	0.03	0.15	22.10	12	577	819	58	0.22	0.0	1.007	0	0	0	0	15 P
P CO24380	CO-1630019527	ABC	1/OAAC	15.10Y	125.8	0.01	0.16	17.86	7	415	695	51	0.07	0.0	1.100	0	0	0	0	8 P
P CO24379	CO24380	ABC	1/OAAC	15.09Y	125.7	0.03	0.20	17.86	7	415	695	51	0.18	0.0	1.321	0	0	0	1	8 P
P CO24514	CO24379	ABC	1/OAAC	15.09Y	125.7	0.01	0.21	17.08	7	376	676	49	0.07	0.0	1.416	0	0	0	0	1 P
P CO24513	CO24514	ABC	1/OAAC	15.09Y	125.7	0.01	0.22	17.08	7	376	676	49	0.06	0.0	1.499	0	0	0	0	1 P
P CO24116	CO24513	ABC	1/OPRIURD	15.09Y	125.7	0.00	0.23	17.08	11	376	676	49	0.03	0.0	1.546	0	0	0	1	1 P
P CO24388	CO-1630019527	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	4.49	2	162	124	79	0.00	0.0	1.048	0	0	0	1	7 P
P CO24389	CO24388	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	3.80	1	133	110	77	0.00	0.0	1.089	0	0	0	0	6 P
P CO24390	CO24389	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	1.58	1	35	62	49	0.00	0.0	1.285	0	0	0	0	2 P
P CO24391	CO24390	ABC	1/OAAC	15.10Y	125.8	0.00	0.15	1.58	1	35	62	49	0.00	0.0	1.332	0	0	0	1	2 P
P CO24120	CO24391	ABC	1/OPRIURD	15.10Y	125.8	0.00	0.15	1.44	1	32	57	49	0.00	0.0	1.359	0	0	0	1	1 P
P CA71	CO23958	ABC	Cap (450)	15.10Y	125.9	0.00	0.09	-10.92	0	0	-495	0	0.00	0.0	0.796	0	0	0	0	0 P
P CO-819797655	CO1498486379	C	1/OPRIURD	15.11Y	125.9	0.00	0.07	-0.06	0	0	-1	0	0.00	0.0	0.824	0	0	0	1	1 P
----- Feeder No. 0 (Industrial Park) Beginning with Device OC738 -----																				
P CO23954	CO24739	ABC	336ACSR	15.09Y	125.8	0.00	0.16	10.32	2	358	302	76	0.00	0.0	0.423	0	0	0	0	9 P
P CO24736	CO23954	ABC	336ACSR	15.09Y	125.8	0.00	0.17	10.03	2	343	298	75	0.00	0.0	0.453	0	0	0	0	3 P
P CO24737	CO24736	ABC	336ACSR	15.09Y	125.8	0.00	0.17	10.03	2	343	298	75	0.00	0.0	0.485	0	0	0	0	3 P
P CO24821	CO24737	ABC	1/OPRIURD	15.09Y	125.8	0.00	0.17	9.83	7	334	295	75	0.00	0.0	0.522	0	0	0	2	2 P
P CO-1366423321	CO-980555440	ABC	2ACSR	15.10Y	125.8	0.04	0.13	65.91	37	2239	1979	75	0.84	0.0	0.188	0	0	0	0	6 P
P CO24377	CO-1366423321	ABC	336ACSR	15.10Y	125.8	0.00	0.13	65.91	13	2238	1979	75	0.04	0.0	0.200	0	0	0	0	6 P
P CO24738	CO24377	ABC	336ACSR	15.10Y	125.8	0.00	0.14	65.91	13	2238	1978	75	0.02	0.0	0.206	0	0	0	0	6 P
P CO24378	CO24738	ABC	1/OPRIURD	15.09Y	125.8	0.05	0.19	65.91	44	2238	1978	75	1.65	0.0	0.348	0	0	0	0	6 P
P CO24953	CO24378	ABC	1/OPRIURD	15.09Y	125.7	0.02	0.21	66.11	44	2236	1992	75	0.62	0.0	0.402	0	0	0	3	3 P
P OH190209003	CO24953	ABC	336ACSR	15.09Y	125.7	0.00	0.21	66.16	13	2235	1995	75	0.02	0.0	0.410	0	0	0	0	0 P
----- Feeder No. 0 (Moransburg) Beginning with Device OC368987805 -----																				
L CO24238	CO23899	B	4ACSR	7.01Y	116.9	0.01	9.01	36.76	26	252	57	98	0.03	0.0	9.054	0	0	0	0	45 L
L CO24239	CO24238	B	4ACSR	7.01Y	116.8	0.13	9.14	36.76	26	252	57	98	0.26	0.1	9.133	0	0	0	3	45 L
L CO24869	CO24239	B	4ACSR	6.99Y	116.5	0.30	9.44	32.68	23	223	51	97	0.54	0.2	9.338	0	0	0	0	40 L
L CO24713	CO24869	B	4ACSR	6.96Y	116.1	0.41	9.86	32.68	23	223	51	97	0.73	0.3	9.616	0	0	0	0	40 L
L CO24198	CO24713	B	4ACSR	6.96Y	116.0	0.10	9.97	32.53	23	221	50	98	0.19	0.0	9.689	0	0	0	2	39 L
L CO24714	CO24198	B	4ACSR	6.95Y	115.9	0.03	10.00	29.70	21	202	46	98	0.05	0.0	9.716	0	0	0	0	37 L
L CO24715	CO24714	B	4ACSR	6.95Y	115.8	0.14	10.14	29.70	21	202	46	98	0.22	0.1	9.820	0	0	0	0	37 L
L CO23870	CO24715	B	4ACSR	6.94Y	115.8	0.04	10.19	29.16	21	198	45	98	0.06	0.0	9.852	0	0	0	0	35 L
L CO23871	CO23870	B	4ACSR	6.93Y	115.6	0.14	10.33	29.16	21	198	45	98	0.23	0.1	9.962	0	0	0	0	34 L
L CO23869	CO23871	B	4ACSR	6.92Y	115.4	0.23	10.57	29.16	21	197	45	97	0.37	0.1	10.139	0	0	0	0	33 L
L CO23872	CO23869	B	4ACSR	6.92Y	115.3	0.06	10.63	28.20	20	191	43	98	0.09	0.0	10.187	0	0	0	0	32 L
L CO24201	CO23872	B	4ACSR	6.91Y	115.2	0.07	10.70	27.56	20	186	42	98	0.10	0.0	10.244	0	0	0	1	31 L
L CO24199	CO24201	B	4ACSR	6.90Y	115.1	0.14	10.84	27.11	19	183	41	98	0.20	0.1	10.358	0	0	0	0	30 L
L CO24200	CO24199	B	4ACSR	6.90Y	115.0	0.10	10.95	25.52	18	172	39	98	0.15	0.0	10.452	0	0	0	0	29 L
L CO24007	CO24200	B	4ACSR	6.90Y	115.0	0.00	10.96	0.83	1	6	1	99	0.00	0.0	10.480	0	0	0	1	1 L
L CO23873	CO24007	B	4ACSR	6.89Y	114.9	0.13	11.09	24.68	18	166	37	98	0.17	0.1	10.569	0	0	0	0	28 L
L CO24826	CO23873	B	4ACSR	6.89Y	114.9	0.00	11.09	24.66	18	166	37	98	0.00	0.0	10.576	0	0	0	0	27 L
L OC729	CO24826	B	25 H OCR	6.89Y	114.9	0.00	11.09	24.66	99	166	37	98	0.00	0.0	10.576	0	0	0	0	27 L
L CO24827	OC729	B	4ACSR	6.87Y	114.6	0.25	11.35	24.66	18	166	37	98	0.33	0.2	10.801	0	0	0	0	27 L
L CO24204	CO24827	B	4ACSR	6.87Y	114.6	0.01	11.36	22.06	16	148	33	98	0.01	0.0	10.815	0	0	0	0	26 L
L CO24202	CO24204	B	4ACSR	6.86Y	114.3	0.26	11.63	22.06	16	148	33	98	0.32	0.2	11.082	0	0	0	0	26 L
L CO24716	CO24202	B	2ACSR	6.84Y	114.1	0.22	11.85	21.93	12	147	33	98	0.25	0.1	11.403	0	0	0	1	25 L
L CO1067505392	CO24716	B	2ACSR	6.84Y	114.0	0.11	11.97	20.65	11	138	31	98	0.11	0.0	11.574	0	0	0	0	23 L
L CO24717	CO1067505392	B	4ACSR	6.83Y	113.8	0.15	12.13	20.65	15	138	31	98	0.17	0.1	11.742	0	0	0	1	23 L
L CO24203	CO24717	B	4ACSR	6.79Y	113.3	0.54	12.67	20.30	15	135	30	98	0.59	0.4	12.328	0	0	0	2	22 L
L CO24718	CO24203	B	4ACSR	6.79Y	113.1	0.15	12.83	18.93	14	126	28	98	0.16	0.1	12.513	0	0	0	0	19 L
L CO24872	CO24718	B	4ACSR	6.78Y	113.0	0.07	12.90	17.37	12	115	25	98	0.07	0.0	12.608	0	0	0	2	18 L
L CO24719	CO24872	B	4ACSR	6.78Y	113.0	0.04	12.94	15.20	11	101	22	98	0.03	0.0	12.666	0	0	0	0	16 L
L CO23983	CO24719	B	4ACSR	6.78Y	113.0	0.00	12.95	2.01	1	13	3	97	0.00	0.0	12.741	0	0	0	1	1 L
L CO24158	CO23983	B	2ACSR	6.78Y	113.0	0.04	12.99	13.19	7	87	19	98	0.03	0.0	12.785	0	0	0	1	15 L
L CO1529796732	CO24158	B	2ACSR	6.78Y	113.0	0.00	12.99	1.07	1	7	2	96	0.00	0.0	12.818	0	0	0	1	1 L
L CO-1478262125	CO24158	B	2ACSR	6.77Y	112.9	0.01	13.01	12.07	7	80	18	98	0.00	0.0	12.825	0	0			

Balanced Voltage Drop Report
Source: MAYSVILLE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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Units Displayed In Volts																				
-Base Voltage:120.0-																				
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	-----Element-----			
																Cons	Cons	On	Thru	
L CO-1671292490	CO24717	B	2ACSR	6.83Y	113.8	0.00	12.13	0.00	0	0	0	100	0.00	0.0	11.812	0	0	0	0	L
L CO-1918465395	CO24716	B	2ACSR	6.84Y	114.1	0.00	11.85	0.00	0	0	0	100	0.00	0.0	11.459	0	0	0	1	L
L CO24025	CO24202	B	4ACSR	6.86Y	114.3	0.00	11.63	0.12	0	1	0	100	0.00	0.0	11.136	0	0	0	1	L
L CO24229	CO24827	B	4ACSR	6.87Y	114.6	0.00	11.35	2.59	2	17	4	97	0.00	0.0	10.843	0	0	0	0	L
L CO24227	CO24229	B	4ACSR	6.87Y	114.6	0.01	11.37	2.59	2	17	4	97	0.00	0.0	10.981	0	0	0	0	L
L CO24228	CO24227	B	4ACSR	6.87Y	114.6	0.00	11.37	2.59	2	17	4	97	0.00	0.0	11.019	0	0	0	1	L
L CO24008	CO23873	B	4ACSR	6.89Y	114.9	0.00	11.09	0.01	0	0	0	100	0.00	0.0	10.649	0	0	0	1	L
L CO1492077296	CO24199	B	2ACSR	6.90Y	115.1	0.00	10.85	1.59	1	11	2	98	0.00	0.0	10.435	0	0	0	1	L
L CO24223	CO23872	B	4ACSR	6.92Y	115.3	0.00	10.64	0.63	0	4	1	97	0.00	0.0	10.358	0	0	0	0	L
L CO24224	CO24223	B	4ACSR	6.92Y	115.3	0.00	10.64	0.63	0	4	1	97	0.00	0.0	10.413	0	0	0	1	L
L CO24006	CO23869	B	4ACSR	6.92Y	115.4	0.00	10.57	0.95	1	6	1	99	0.00	0.0	10.165	0	0	0	1	L
L CO24225	CO23871	B	4ACSR	6.93Y	115.6	0.00	10.33	0.00	0	0	0	100	0.00	0.0	10.082	0	0	0	0	L
L CO24226	CO24225	B	4ACSR	6.93Y	115.6	0.00	10.33	0.00	0	0	0	100	0.00	0.0	10.314	0	0	0	1	L
L CO24005	CO23870	B	4ACSR	6.94Y	115.8	0.00	10.19	0.00	0	0	0	100	0.00	0.0	9.975	0	0	0	1	L
L CO24003	CO24715	B	4ACSR	6.95Y	115.8	0.00	10.15	0.54	0	4	1	97	0.00	0.0	9.873	0	0	0	2	L
L CO24004	CO24713	B	4ACSR	6.96Y	116.1	0.00	9.86	0.15	0	1	0	100	0.00	0.0	9.682	0	0	0	1	L
L CO23921	CO24239	B	4/OACSR	7.01Y	116.8	0.00	9.14	0.00	0	0	0	100	0.00	0.0	9.379	0	0	0	2	L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total			
KW	9838	213	0	0	0	0	166	0.00	10217	Lowest Voltage = 112.82 on Element CO24725		
KVAR	5080	144	-1797	-105	0	0	182		3505	Max Accm VoltD = 13.17 on Element CO24725		
										Max Elem VoltD = 1.34 on Element CO23897		

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
MURPHYSVILLE		ABC	MURPHYSVIL	15.11Y	125.9	0.00	0.00	337.99	0	15203	1978	99	0.00	0.0	0.000	0	0	0	2855		
----- Feeder No. 0 (Strodes Run) Beginning with Device OCSTRODESRUN -----																					
----- Feeder No. 0 (Barret Pk) Beginning with Device OC917 -----																					
----- Feeder No. 0 (Stone Wall) Beginning with Device OC915 -----																					
L CO29661	CO29660	ABC	1/OACSR	13.90Y	115.8	1.58	10.12	176.53	77	7416	853	99	91.91	1.2	7.106	1	0	0	1590	L	
L CO30026	CO30025	C	4ACSR	7.01Y	116.9	0.49	9.01	47.49	34	333	35	99	1.33	0.4	12.641	0	0	0	1	58	L
L CO30006	CO30026	C	4ACSR	7.01Y	116.9	0.00	9.01	0.44	0	3	0	100	0.00	0.0	12.868	0	0	0	1	1	L
L CO29986	CO30026	C	4ACSR	7.01Y	116.8	0.11	9.13	46.46	33	324	34	99	0.30	0.0	12.698	0	0	0	0	56	L
L CO30005	CO29986	C	4ACSR	7.01Y	116.8	0.00	9.13	1.09	1	8	1	99	0.00	0.0	12.735	0	0	0	1	1	L
L CO29987	CO29986	C	4ACSR	7.00Y	116.7	0.14	9.28	45.36	32	316	33	99	0.38	0.1	12.773	0	0	0	0	55	L
L CO29988	CO29987	C	4ACSR	6.99Y	116.5	0.13	9.41	44.24	32	308	32	99	0.33	0.1	12.843	0	0	0	0	52	L
L CO30029	CO29988	C	4ACSR	6.99Y	116.5	0.02	9.43	6.70	5	47	5	99	0.00	0.0	12.919	0	0	0	1	5	L
L CO30030	CO30029	C	4ACSR	6.99Y	116.5	0.00	9.44	4.69	3	33	3	100	0.00	0.0	12.957	0	0	0	2	4	L
L CO30031	CO30030	C	4ACSR	6.99Y	116.5	0.00	9.44	0.81	1	6	1	99	0.00	0.0	12.985	0	0	0	1	1	L
L CO30074	CO30030	C	2ACSR	6.99Y	116.5	0.00	9.44	1.39	1	10	1	100	0.00	0.0	13.044	0	0	0	1	1	L
L CO29989	CO29988	C	4ACSR	6.98Y	116.3	0.21	9.62	36.85	26	256	27	99	0.44	0.1	12.976	0	0	0	0	46	L
L CO29990	CO29989	C	4ACSR	6.97Y	116.1	0.19	9.82	35.70	26	248	26	99	0.38	0.1	13.099	0	0	0	0	45	L
L CO30032	CO29990	C	4ACSR	6.96Y	116.1	0.02	9.84	4.90	4	34	3	100	0.00	0.0	13.203	0	0	0	1	6	L
L CO30033	CO30032	C	4ACSR	6.96Y	116.1	0.01	9.85	3.13	2	22	2	100	0.00	0.0	13.279	0	0	0	3	3	L
L CO30002	CO30032	C	4ACSR	6.96Y	116.1	0.00	9.84	1.63	1	11	1	100	0.00	0.0	13.260	0	0	0	2	2	L
L CO30034	CO29990	C	4ACSR	6.97Y	116.1	0.00	9.82	29.96	21	208	21	99	0.01	0.0	13.104	0	0	0	0	38	L
L CO2126628670	CO30034	C	4ACSR	6.96Y	116.1	0.01	9.84	29.96	21	208	21	99	0.03	0.0	13.117	0	0	0	0	38	L
L CO58609891	CO2126628670	C	4ACSR	6.96Y	116.1	0.03	9.87	27.63	20	192	20	99	0.05	0.0	13.145	0	0	0	0	35	L
L CO30035	CO58609891	C	4ACSR	6.95Y	115.9	0.13	10.01	27.63	20	192	20	99	0.21	0.1	13.258	0	0	0	1	35	L
L CO30082	CO30035	C	4ACSR	6.95Y	115.9	0.06	10.07	11.68	8	81	8	100	0.04	0.0	13.382	0	0	0	3	18	L
L CO30083	CO30082	C	4ACSR	6.95Y	115.8	0.05	10.13	10.75	8	74	8	99	0.03	0.0	13.495	0	0	0	0	15	L
L CO30084	CO30083	C	4ACSR	6.95Y	115.8	0.00	10.13	10.06	7	70	7	100	0.00	0.0	13.514	0	0	0	0	14	L
L CO30085	CO30084	C	4ACSR	6.95Y	115.8	0.00	10.14	10.06	7	70	7	100	0.00	0.0	13.523	0	0	0	1	14	L
L CO30086	CO30085	C	4ACSR	6.94Y	115.8	0.02	10.16	9.51	7	66	7	99	0.01	0.0	13.583	0	0	0	0	13	L
L CO30075	CO30086	C	4ACSR	6.94Y	115.8	0.00	10.17	0.72	1	5	1	98	0.00	0.0	13.722	0	0	0	3	3	L
L CO30076	CO30086	C	4ACSR	6.94Y	115.8	0.01	10.18	8.78	6	61	6	100	0.00	0.0	13.616	0	0	0	1	10	L
L CO30077	CO30076	C	4ACSR	6.94Y	115.8	0.00	10.18	5.54	4	38	4	99	0.00	0.0	13.640	0	0	0	0	5	L
L CO30078	CO30077	C	4ACSR	6.94Y	115.8	0.00	10.19	5.54	4	38	4	99	0.00	0.0	13.658	0	0	0	2	5	L
L CO30079	CO30078	C	4ACSR	6.94Y	115.8	0.00	10.19	5.51	4	38	4	99	0.00	0.0	13.682	0	0	0	3	3	L
L CO30080	CO30076	C	4ACSR	6.94Y	115.8	0.00	10.18	3.10	2	21	2	100	0.00	0.0	13.639	0	0	0	3	4	L
L CO30081	CO30080	C	4ACSR	6.94Y	115.8	0.00	10.18	0.94	1	7	1	99	0.00	0.0	13.663	0	0	0	1	1	L
L CO30001	CO30083	C	4ACSR	6.95Y	115.8	0.00	10.13	0.68	0	5	0	100	0.00	0.0	13.552	0	0	0	1	1	L
L CO30036	CO30035	C	2ACSR	6.95Y	115.9	0.00	10.02	5.00	3	35	4	99	0.00	0.0	13.311	0	0	0	2	3	L
L CO30037	CO30036	C	2ACSR	6.95Y	115.9	0.00	10.02	1.52	1	11	1	100	0.00	0.0	13.364	0	0	0	1	1	L
L CO30038	CO30035	C	4ACSR	6.95Y	115.9	0.00	10.02	9.71	7	67	7	99	0.00	0.0	13.281	0	0	0	2	13	L
L CO30039	CO30038	C	4ACSR	6.95Y	115.9	0.02	10.05	6.78	5	47	5	99	0.01	0.0	13.369	0	0	0	1	11	L
L CO30040	CO30039	C	4ACSR	6.95Y	115.9	0.01	10.06	5.97	4	41	4	100	0.00	0.0	13.429	0	0	0	3	10	L
L CO30041	CO30040	C	4ACSR	6.95Y	115.9	0.01	10.07	4.00	3	28	3	99	0.00	0.0	13.506	0	0	0	1	7	L
L CO30008	CO30041	C	4ACSR	6.95Y	115.9	0.00	10.08	2.84	2	20	2	100	0.00	0.0	13.535	0	0	0	3	3	L
L OH190102001	CO30008	C	4ACSR	6.95Y	115.9	0.00	10.08	1.16	1	8	1	99	0.00	0.0	13.582	0	0	0	0	0	L
L CO-1691455819	CO30041	C	2ACSR	6.95Y	115.9	0.00	10.08	1.13	1	8	1	99	0.00	0.0	13.569	0	0	0	0	3	L
L CO1329745239	CO-1691455819	C	2ACSR	6.95Y	115.9	0.00	10.08	1.06	1	7	1	99	0.00	0.0	13.636	0	0	0	2	2	L
L CO916209253	CO-1691455819	C	2ACSR	6.95Y	115.9	0.00	10.08	0.07	0	0	0	100	0.00	0.0	13.628	0	0	0	0	1	L
L CO1564467963	CO916209253	C	2ACSR	6.95Y	115.9	0.00	10.08	0.07	0	0	0	100	0.00	0.0	13.697	0	0	0	1	1	L
L CO1569112457	CO916209253	C	2ACSR	6.95Y	115.9	0.00	10.08	0.00	0	0	0	100	0.00	0.0	13.676	0	0	0	0	0	L
L CO30043	CO1569112457	C	4ACSR	6.95Y	115.9	0.00	10.08	0.00	0	0	0	100	0.00	0.0	13.875	0	0	0	0	0	L
L CO399032542	CO2126628670	C	4ACSR	6.96Y	116.1	0.00	9.85	2.32	2	16	2	99	0.00	0.0	13.186	0	0	0	2	3	L
L CO1030880540	CO399032542	C	2ACSR	6.96Y	116.1	0.00	9.85	1.15	1	8	1	99	0.00	0.0	13.244	0	0	0	1	1	L
L CO-660697368	CO29990	C	2ACSR	6.97Y	116.1	0.00	9.82	0.83	0	6	1	99	0.00	0.0	13.169	0	0	0	1	1	L
L CO30003	CO29989	C	4ACSR	6.98Y	116.3	0.00	9.63	1.15	1	8	1	99	0.00	0.0	13.033	0	0	0	1	1	L
L CO30004	CO29988	C	4ACSR	6.99Y	116.5	0.00	9.41	0.67	0	5	0	100	0.00	0.0	12.938	0	0	0	1	1	L
L CO30027	CO29987	C	4ACSR	7.00Y	116.7	0.00	9.28	1.07	1	7	1	99	0.00	0.0	12.830	0	0	0	0	2	L
L CO30015	CO30027	C	2ACSR	7.00Y	116.7	0.00	9.28	0.00	0	0	0	100	0.00	0.0	12.881	0	0	0	1	1	L
L CO30028	CO30027	C	4ACSR	7.00Y	116.7	0.00	9.28	1.07	1	7	1	99	0.00	0.0	12.944	0	0	0	1	1	L
L CO-1682037951	CO29987	C	2ACSR	7.00Y	116.7	0.00	9.28	0.04	0	0	0	100	0.00	0.0	12.808	0	0	0	1	1	L
P OH180879001	CO30132	B	2ACSR	14.58Y	121.5	0.00	4.47	-0.11	0	0	-2	0	0.00	0.0	14.47						

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Summary

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

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Units Displayed In Volts																					
-Base Voltage:120.0-																					
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	Element KW KVAR	Cons On	Cons Thru		
L CO27439	CO27438	C	4ACSR	7.01Y	116.8	0.00	9.15	1.01	1	7	1	99	0.00	0.0	20.349	0	0	0	4	L	
L CO27441	CO27439	C	4ACSR	7.01Y	116.8	0.00	9.15	0.56	0	4	0	100	0.00	0.0	20.451	0	0	0	1	3	L
L CO27442	CO27441	C	4ACSR	7.01Y	116.8	0.00	9.16	0.56	0	4	0	100	0.00	0.0	20.495	0	0	0	1	2	L
L CO27440	CO27442	C	4ACSR	7.01Y	116.8	0.00	9.16	0.00	0	0	0	100	0.00	0.0	20.519	0	0	0	1	1	L
L CO27343	CO27439	C	4ACSR	7.01Y	116.8	0.00	9.16	0.45	0	3	0	100	0.00	0.0	20.558	0	0	0	1	1	L
L CO27329	CO27437	C	4ACSR	7.00Y	116.8	0.02	9.16	5.73	4	40	4	100	0.00	0.0	20.306	0	0	0	3	10	L
L CO27344	CO27329	C	4ACSR	7.00Y	116.8	0.00	9.16	0.00	0	0	0	100	0.00	0.0	20.377	0	0	0	0	0	L
L CO27443	CO27329	C	4ACSR	7.00Y	116.8	0.01	9.17	5.14	4	36	4	99	0.00	0.0	20.360	0	0	0	0	7	L
L OH240554001	CO27443	C	4ACSR	7.00Y	116.8	0.00	9.17	0.00	0	0	0	100	0.00	0.0	20.461	0	0	0	0	0	L
L CO27444	CO27443	C	4ACSR	7.00Y	116.8	0.01	9.19	5.14	4	36	4	99	0.00	0.0	20.420	0	0	0	3	7	L
L CO27447	CO27444	C	4ACSR	7.00Y	116.8	0.00	9.19	0.18	0	1	0	100	0.00	0.0	20.476	0	0	0	0	2	L
L CO27448	CO27447	C	4ACSR	7.00Y	116.8	0.00	9.19	0.18	0	1	0	100	0.00	0.0	20.538	0	0	0	2	2	L
L CO27446	CO27448	C	4ACSR	7.00Y	116.8	0.00	9.19	0.00	0	0	0	100	0.00	0.0	20.552	0	0	0	0	0	L
L CO27445	CO27446	C	4ACSR	7.00Y	116.8	0.00	9.19	0.00	0	0	0	100	0.00	0.0	20.628	0	0	0	0	0	L
L CO27345	CO27444	C	4ACSR	7.00Y	116.8	0.00	9.19	2.16	2	15	2	99	0.00	0.0	20.476	0	0	0	2	2	L
L CO27427	CO27328	C	4ACSR	7.01Y	116.9	0.01	9.06	2.62	2	18	2	99	0.00	0.0	19.988	0	0	0	2	9	L
L CO27428	CO27427	C	4ACSR	7.01Y	116.9	0.00	9.07	2.20	2	15	2	99	0.00	0.0	20.056	0	0	0	1	7	L
L CO27429	CO27428	C	4ACSR	7.01Y	116.9	0.00	9.07	2.03	1	14	1	100	0.00	0.0	20.122	0	0	0	0	6	L
L CO27430	CO27429	C	4ACSR	7.01Y	116.9	0.01	9.09	2.03	1	14	1	100	0.00	0.0	20.293	0	0	0	1	6	L
L CO27431	CO27430	C	4ACSR	7.01Y	116.8	0.02	9.11	1.97	1	14	1	100	0.00	0.0	20.577	0	0	0	1	5	L
L CO27432	CO27431	C	4ACSR	7.01Y	116.8	0.01	9.12	1.41	1	10	1	100	0.00	0.0	20.784	0	0	0	0	4	L
L CO27433	CO27432	C	4ACSR	7.01Y	116.8	0.00	9.13	0.54	0	4	0	100	0.00	0.0	20.841	0	0	0	0	2	L
L CO27434	CO27433	C	4ACSR	7.01Y	116.8	0.00	9.13	0.54	0	4	0	100	0.00	0.0	20.879	0	0	0	1	2	L
L CO30579	CO27434	C	4ACSR	7.01Y	116.8	0.00	9.13	0.02	0	0	0	100	0.00	0.0	21.040	0	0	0	1	1	L
L CO27346	CO27432	C	4ACSR	7.01Y	116.8	0.00	9.13	0.86	1	6	1	99	0.00	0.0	20.936	0	0	0	2	2	L
L CO998482696	CO27426	C	2ACSR	7.01Y	116.9	0.00	9.01	0.00	0	0	0	100	0.00	0.0	19.916	0	0	0	0	2	L
L CO-1176750387	CO998482696	C	2ACSR	7.01Y	116.9	0.00	9.01	0.00	0	0	0	100	0.00	0.0	19.970	0	0	0	2	2	L
L CO27391	CO27319	C	4ACSR	7.01Y	116.9	0.09	9.04	10.92	8	76	8	99	0.05	0.0	19.808	0	0	0	1	23	L
L CO27392	CO27391	C	4ACSR	7.01Y	116.8	0.07	9.11	10.62	8	74	8	99	0.04	0.0	19.959	0	0	0	1	22	L
L CO27393	CO27392	C	4ACSR	7.01Y	116.8	0.00	9.11	0.57	0	4	0	100	0.00	0.0	19.987	0	0	0	0	2	L
L CO27394	CO27393	C	4ACSR	7.01Y	116.8	0.00	9.11	0.57	0	4	0	100	0.00	0.0	20.092	0	0	0	2	2	L
L CO27395	CO27392	C	4ACSR	7.01Y	116.8	0.00	9.11	0.89	1	6	1	99	0.00	0.0	20.051	0	0	0	0	2	L
L CO27396	CO27395	C	4ACSR	7.01Y	116.8	0.00	9.11	0.89	1	6	1	99	0.00	0.0	20.114	0	0	0	0	2	L
L CO27397	CO27396	C	4ACSR	7.01Y	116.8	0.00	9.11	0.00	0	0	0	100	0.00	0.0	20.234	0	0	0	0	1	L
L CO27398	CO27397	C	4ACSR	7.01Y	116.8	0.00	9.11	0.00	0	0	0	100	0.00	0.0	20.258	0	0	0	0	1	L
L CO27399	CO27398	C	4ACSR	7.01Y	116.8	0.00	9.11	0.00	0	0	0	100	0.00	0.0	20.274	0	0	0	1	1	L
L CO27400	CO27396	C	2ACSR	7.01Y	116.8	0.00	9.11	0.89	0	6	1	99	0.00	0.0	20.159	0	0	0	0	1	L
L CO27401	CO27400	C	2ACSR	7.01Y	116.8	0.00	9.11	0.89	0	6	1	99	0.00	0.0	20.231	0	0	0	1	1	L
L CO27402	CO27392	C	4ACSR	7.00Y	116.7	0.10	9.21	8.08	6	56	6	99	0.04	0.0	20.243	0	0	0	1	17	L
L CO27403	CO27402	C	4ACSR	7.00Y	116.7	0.00	9.21	7.39	5	52	5	100	0.00	0.0	20.257	0	0	0	0	16	L
L CO27404	CO27403	C	4ACSR	7.00Y	116.7	0.00	9.21	0.00	0	0	0	100	0.00	0.0	20.456	0	0	0	0	1	L
L CO27405	CO27404	C	4ACSR	7.00Y	116.7	0.00	9.21	0.00	0	0	0	100	0.00	0.0	20.598	0	0	0	1	1	L
L CO27321	CO27403	C	4ACSR	6.99Y	116.6	0.12	9.34	7.39	5	52	5	100	0.05	0.1	20.655	0	0	0	0	15	L
L CO27334	CO27321	C	4ACSR	6.99Y	116.6	0.00	9.34	0.34	0	2	0	100	0.00	0.0	20.740	0	0	0	1	1	L
L CO27320	CO27321	C	4ACSR	6.99Y	116.6	0.05	9.39	7.04	5	49	5	99	0.02	0.0	20.835	0	0	0	0	14	L
L CO27335	CO27320	C	4ACSR	6.99Y	116.6	0.00	9.39	0.00	0	0	0	100	0.00	0.0	20.882	0	0	0	1	1	L
L CO27407	CO27320	C	4ACSR	6.99Y	116.5	0.03	9.43	7.04	5	49	5	99	0.01	0.0	20.952	0	0	0	0	13	L
L CO-1241716369	CO27407	C	2ACSR	6.99Y	116.5	0.05	9.48	7.04	4	49	5	99	0.02	0.0	21.201	0	0	0	0	13	L
L CO-1468795069	CO-1241716369	C	2ACSR	6.99Y	116.5	0.00	9.48	0.66	0	5	0	100	0.00	0.0	21.257	0	0	0	1	3	L
L CO1030920528	CO-1468795069	C	2ACSR	6.99Y	116.5	0.00	9.48	0.46	0	3	0	100	0.00	0.0	21.293	0	0	0	2	2	L
L CO1381945206	CO-1241716369	C	2ACSR	6.99Y	116.5	0.00	9.49	6.38	4	44	5	99	0.00	0.0	21.239	0	0	0	1	10	L
L CO27406	CO1381945206	C	4ACSR	6.98Y	116.4	0.02	9.51	6.22	4	43	4	100	0.00	0.0	21.333	0	0	0	0	9	L
L CO27409	CO27406	C	4ACSR	6.98Y	116.4	0.00	9.52	5.16	4	36	4	99	0.00	0.0	21.350	0	0	0	2	8	L
L CO27410	CO27409	C	4ACSR	6.98Y	116.4	0.00	9.52	3.50	3	24	2	100	0.00	0.0	21.391	0	0	0	0	6	L
L CO27411	CO27410	C	4ACSR	6.98Y	116.4	0.01	9.54	3.50	3	24	2	100	0.00	0.0	21.465	0	0	0	0	6	L
L CO27413	CO27411	C	4ACSR	6.98Y	116.4	0.00	9.54	1.90	1	13	1	100	0.00	0.0	21.522	0	0	0	0	4	L
L CO27414	CO27413	C	4ACSR	6.98Y	116.4	0.00	9.55	1.90	1	13	1	100	0.00	0.0	21.579	0	0	0	0	4	L
L CO27415	CO27414	C	4ACSR	6.98Y	116.4	0.01	9.56	1.90	1	13	1	100	0.00	0.0	21.731	0	0	0	1	4	L
L CO27416	CO27415	C	4ACSR	6.98Y	116.4	0.00	9.56	1.90	1	13	1	100	0.00	0.0	21.806	0	0	0	0	3	L
L CO27412	CO27416	C	4ACSR	6.98Y	116.4	0.00	9.57	1.11	1	8	1	99	0.00	0.0	21.863	0	0	0	0	2	L
L CO27337	CO27412	C	4ACSR	6.98Y	116.4	0.00	9.57	1.11	1	8	1	99	0.00	0.0	21.938	0	0	0	1	1	L
L CO27338	CO27412	C	4ACSR	6.98Y	116.4	0.00	9.57	0.00	0	0	0	100	0.00	0.0	21.948	0	0	0	1	1	L
L CO27349	CO27416	C	2ACSR	6.98Y	116.4	0.00	9.57	0.79	0	6	1	99	0.00	0.0	21.864	0	0	0	1	1	L
L CO27336	CO27411	C	4ACSR	6.98Y	116.4	0.00	9.54	1.60	1	11	1	100	0.00	0.0	21.522	0	0	0	2	2	L
L CO27350	CO27406	C	2ACSR	6.98Y	116.4	0.00	9.52	1.06	1	7	1	99	0.00	0.0	21.383	0	0	0	1	1	L
P CO27633	CO27630	ABC	1/OACSR	14.65Y	122.1	0.00	3.86	-7.06	3	0	-311	0	0.00	0.0	12.898	0	0	0	0	0	P
P CA73	CO27633	ABC	Cap (300)	14.65Y	122.1	0.00	3.86	-7.06	0	0	-311	0	0.00	0.0	12.898	0	0	0	0		

Balanced Voltage Drop Report
Source: MURPHYSVILLE

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

Units Displayed In Volts																		
-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	PF	% Loss	% Loss	mi From Src	-----Element----- Length (mi)	Cons On	Cons Thru

Balanced Voltage Drop Report
Source: PEASTICKS

Database: C:\MILSOFT\CWP\LOAD GROWTH 2012-2013(WITH IMPROVEMENTS).WM\
Title:
Case:

		Units Displayed In Volts														-----Element-----				
		-Base Voltage:120.0-																		
Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Length (mi)	KW	KVAR	Cons On	Cons Thru
PEASTICKS		ABC	PEASTICKS	15.11Y	125.9	0.00	0.00	329.73	0	14849	1794	99	0.00	0.0	0.000	0	0	0	0	2931
----- Feeder No. 0 (Hart Pike) Beginning with Device OC237 -----																				
----- Feeder No. 0 (Fordge Mill) Beginning with Device OC234 -----																				
----- Feeder No. 0 (Owingsville/Sharpsburg) Beginning with Device REC824 -----																				
----- Feeder No. 0 (Moores Ferry) Beginning with Device REC823 -----																				
L CO1313	CO1400	B	4ACSR	7.01Y	116.9	0.02	9.01	2.96	2	21	2	100	0.00	0.0	6.957	0	0	0	1	1 L
L CO1401	CO1400	B	4ACSR	7.01Y	116.9	0.07	9.06	40.19	29	281	28	100	0.16	0.0	6.826	0	0	0	0	47 L
L CO1276	CO1401	B	4ACSR	7.00Y	116.7	0.18	9.24	40.19	29	281	28	100	0.41	0.1	6.931	0	0	0	0	47 L
L CO1402	CO1276	B	4ACSR	6.99Y	116.6	0.09	9.34	22.42	16	156	16	99	0.12	0.0	7.031	0	0	0	2	29 L
L CO1403	CO1402	B	4ACSR	6.99Y	116.5	0.06	9.40	22.42	16	156	16	99	0.08	0.0	7.096	0	0	0	0	27 L
L CO1404	CO1403	B	4ACSR	6.99Y	116.5	0.01	9.41	3.36	2	23	2	100	0.00	0.0	7.172	0	0	0	1	2 L
L CO1405	CO1404	B	4ACSR	6.99Y	116.5	0.00	9.41	1.52	1	11	1	100	0.00	0.0	7.219	0	0	0	1	1 L
L CO1406	CO1403	B	4ACSR	6.99Y	116.5	0.05	9.45	19.05	14	133	13	100	0.05	0.0	7.158	0	0	0	2	25 L
L CO1407	CO1406	B	4ACSR	6.98Y	116.4	0.08	9.53	18.60	13	129	13	99	0.08	0.0	7.260	0	0	0	1	23 L
L CO1408	CO1407	B	2ACSR	6.98Y	116.4	0.02	9.56	18.60	10	129	13	99	0.02	0.0	7.308	0	0	0	0	22 L
L CO-1538821634	CO1408	B	2ACSR	6.98Y	116.3	0.05	9.62	18.24	10	127	13	99	0.05	0.0	7.413	0	0	0	0	22 L
L CO1414	CO-1538821634	B	4ACSR	6.98Y	116.3	0.01	9.63	14.97	11	104	10	100	0.01	0.0	7.432	0	0	0	0	16 L
L CO1415	CO1414	B	4ACSR	6.97Y	116.3	0.06	9.69	14.97	11	104	10	100	0.05	0.0	7.528	0	0	0	1	16 L
L CO1416	CO1415	B	4ACSR	6.97Y	116.2	0.04	9.74	14.65	10	102	10	100	0.03	0.0	7.603	0	0	0	2	15 L
L CO1417	CO1416	B	4ACSR	6.97Y	116.2	0.00	9.74	0.63	0	4	0	100	0.00	0.0	7.659	0	0	0	1	1 L
L CO1418	CO1416	B	4ACSR	6.97Y	116.2	0.02	9.76	14.01	10	97	10	99	0.01	0.0	7.640	0	0	0	0	12 L
L CO1419	CO1418	B	4ACSR	6.97Y	116.2	0.00	9.76	0.66	0	5	0	100	0.00	0.0	7.697	0	0	0	2	2 L
L CO1420	CO1418	B	4ACSR	6.97Y	116.2	0.03	9.79	13.35	10	93	9	100	0.02	0.0	7.692	0	0	0	1	10 L
L CO1421	CO1420	B	4ACSR	6.97Y	116.1	0.02	9.82	11.49	8	80	8	100	0.01	0.0	7.739	0	0	0	0	9 L
L CO1422	CO1421	B	4ACSR	6.96Y	116.1	0.03	9.85	11.49	8	80	8	100	0.02	0.0	7.810	0	0	0	2	9 L
L CO1423	CO1422	B	4ACSR	6.96Y	116.1	0.01	9.87	8.22	6	57	6	99	0.00	0.0	7.857	0	0	0	1	7 L
L CO1424	CO1423	B	4ACSR	6.96Y	116.1	0.01	9.88	7.13	5	49	5	99	0.00	0.0	7.897	0	0	0	3	6 L
L OH390762001	CO1424	B	4ACSR	6.96Y	116.1	0.00	9.88	0.00	0	0	0	100	0.00	0.0	7.944	0	0	0	0	0 L
L CO1425	CO1424	B	4ACSR	6.96Y	116.1	0.01	9.89	3.68	3	26	3	99	0.00	0.0	7.968	0	0	0	1	3 L
L CO1512	CO1425	B	4ACSR	6.96Y	116.0	0.00	9.90	2.88	2	20	2	100	0.00	0.0	8.006	0	0	0	2	2 L
L CO1513	CO1512	B	4ACSR	6.96Y	116.0	0.00	9.90	0.00	0	0	0	100	0.00	0.0	8.011	0	0	0	0	0 L
L OH390762003	CO1512	B	2ACSR	6.96Y	116.0	0.00	9.90	0.00	0	0	0	100	0.00	0.0	8.076	0	0	0	0	0 L
L SW390762001	OH390762003	B	Open	6.96Y	116.0	0.00	9.90	0.00	0	0	0	100	0.00	0.0	8.076	0	0	0	0	0 L
L CO1409	CO-1538821634	B	4ACSR	6.98Y	116.3	0.00	9.63	1.76	1	12	1	100	0.00	0.0	7.525	0	0	0	0	4 L
L CO1314	CO1409	B	4ACSR	6.98Y	116.3	0.00	9.63	1.15	1	8	1	99	0.00	0.0	7.572	0	0	0	1	1 L
L CO1412	CO1409	B	4ACSR	6.98Y	116.3	0.00	9.63	0.61	0	4	0	100	0.00	0.0	7.541	0	0	0	1	3 L
L CO1413	CO1412	B	4ACSR	6.98Y	116.3	0.00	9.63	0.61	0	4	0	100	0.00	0.0	7.603	0	0	0	2	2 L
L CO1410	CO-1538821634	B	4ACSR	6.98Y	116.3	0.01	9.63	1.49	1	10	1	100	0.00	0.0	7.585	0	0	0	1	2 L
L CO1411	CO1410	B	4ACSR	6.98Y	116.3	0.00	9.63	0.00	0	0	0	100	0.00	0.0	7.678	0	0	0	1	1 L
L CO-1990088192	CO1408	B	2ACSR	6.98Y	116.4	0.00	9.56	0.35	0	2	0	100	0.00	0.0	7.347	0	0	0	0	0 L
L CO1277	CO1276	B	4ACSR	7.00Y	116.7	0.02	9.27	17.77	13	124	12	100	0.02	0.0	6.968	0	0	0	0	18 L
L CO1311	CO1277	B	4ACSR	7.00Y	116.7	0.00	9.28	1.85	1	13	1	100	0.00	0.0	7.082	0	0	0	2	2 L
L CO1312	CO1277	B	4ACSR	7.00Y	116.7	0.01	9.28	3.79	3	26	3	99	0.00	0.0	7.030	0	0	0	3	3 L
L CO1498	CO1277	B	4ACSR	7.00Y	116.6	0.02	9.30	12.12	9	84	8	100	0.02	0.0	7.025	0	0	0	1	13 L
L CO1499	CO1498	B	4ACSR	7.00Y	116.6	0.00	9.31	9.96	7	69	7	99	0.00	0.0	7.044	0	0	0	0	12 L
L CO1500	CO1499	B	4ACSR	7.00Y	116.6	0.01	9.32	8.43	6	59	6	99	0.00	0.0	7.096	0	0	0	2	10 L
L CO1501	CO1500	B	4ACSR	6.99Y	116.6	0.00	9.33	2.81	2	20	2	100	0.00	0.0	7.169	0	0	0	1	3 L
L CO1502	CO1501	B	4ACSR	6.99Y	116.6	0.00	9.34	2.81	2	20	2	100	0.00	0.0	7.195	0	0	0	1	2 L
L CO1503	CO1502	B	4ACSR	6.99Y	116.6	0.00	9.34	1.93	1	13	1	100	0.00	0.0	7.248	0	0	0	0	1 L
L CO1504	CO1503	B	4ACSR	6.99Y	116.6	0.00	9.34	1.93	1	13	1	100	0.00	0.0	7.295	0	0	0	1	1 L
L CO1505	CO1500	B	4ACSR	6.99Y	116.6	0.00	9.33	3.35	2	23	2	100	0.00	0.0	7.153	0	0	0	3	5 L
L CO1506	CO1505	B	4ACSR	6.99Y	116.6	0.00	9.33	0.78	1	5	1	98	0.00	0.0	7.200	0	0	0	0	2 L
L CO1507	CO1506	B	4ACSR	6.99Y	116.6	0.00	9.34	0.78	1	5	1	98	0.00	0.0	7.257	0	0	0	2	2 L
L CO1310	CO1499	B	4ACSR	7.00Y	116.6	0.00	9.31	1.52	1	11	1	100	0.00	0.0	7.107	0	0	0	2	2 L

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total		
KW	14251	238	0	0	0	0	361	0.00	14849	Lowest Voltage = 116.09 on Element CO1512	
KVAR	1101	19	0	-21	0	0	696		1794	Max Accm VoltD = 9.90 on Element CO1512	
										Max Elem VoltD = 8.62 on Element RG29378565	

Substation Summary:

Substation	KW	KW Losses	KVAR	KVAR Losses	KVA	% Capacity
SNOW HILL	10940.95	375.00	3321.34	470.00	11433.97	0.00
SHARKEY	16058.69	298.00	2587.57	540.00	16265.82	0.00
RECTORVILLE SUB	16238.53	765.00	3636.65	1543.00	16640.77	0.00
PLUMMERS LANDIN	9971.88	396.00	462.51	545.00	9982.60	0.00
PEASTICKS	14848.78	361.00	1794.02	696.00	14956.76	0.00
OAK RIDGE	9030.66	221.00	1483.15	468.00	9151.64	0.00
MURPHYSVILLE	15203.49	930.00	1977.94	1021.00	15331.61	0.00
MAYSVILLE	10216.95	166.00	3504.81	182.00	10801.38	0.00
HILLSBORO	12334.74	366.00	725.38	487.00	12356.05	0.00
HILDA	41036.17	1086.00	6861.79	1800.00	41605.90	0.00
FLEMINGSBURG	23477.97	428.00	3066.26	783.00	23677.36	0.00
CHARTERS SUB	18061.79	636.00	3909.85	1212.00	18480.13	0.00
Total:	197420.62	6028.00	33331.31	9747.00	200684.01	
