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2009-00143

March 30, 2009

Mr. Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

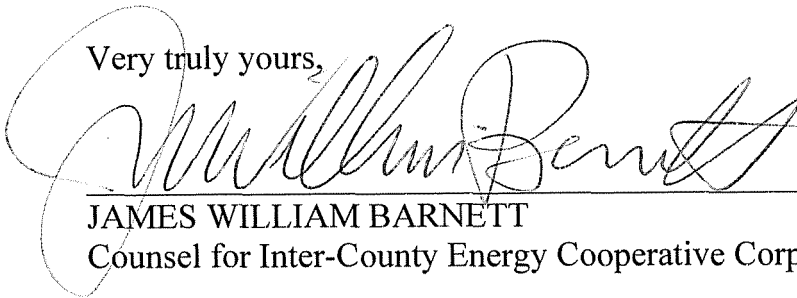
Re: Application for Certificate of Convenience and Necessity

Dear Mr. Derouen:

Please find an original and three copies of documentation concerning Inter-County Energy Cooperative's 2009-2012 Construction Work Plan, as well as an original and three copies of the other exhibits of the Application.

Please advise if additional information is necessary for this application.

Very truly yours,



JAMES WILLIAM BARNETT
Counsel for Inter-County Energy Cooperative Corporation


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PUBLIC SERVICE
COMMISSION


INTER COUNTY
ENERGY COOPERATIVE

A Touchstone Energy Cooperative 

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PUBLIC SERVICE
COMMISSION

**Application for Certificate of
Convenience and Necessity**

**INTER-COUNTY ENERGY
COOPERATIVE CORPORATION**

P.O. Box 87 • Danville, KY 40423-0087

Phone: (859) 236-4561 • Fax: (859) 236-3627

COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION

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APR 02 2009

PUBLIC SERVICE
COMMISSION

APPLICATION OF INTER-COUNTY ENERGY COOPERATIVE)
FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY)
PURSUANT TO K.R.S. 278.020(1) AND 807 K.A.R. 5:001,) CASE NO.
SECTION 9 AND RELATED SECTIONS, AUTHORIZING)
CERTAIN PROPOSED CONSTRUCTION IDENTIFIED AS)
THE 2009-2012 CONSTRUCTION WORK PLAN)

APPLICATION

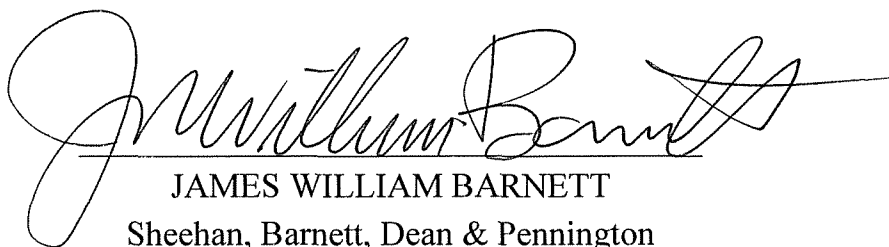
The Application of Inter-County Energy Cooperative respectfully shows:

1. Inter-County Energy Cooperative Corporation is a nonprofit membership cooperative corporation without capital stock, duly organized and existing under K.R.S. Chapter 279, engaged in the business of supplying electric energy to its member-consumers in the Kentucky counties of Boyle, Casey, Garrard, Larue, Lincoln, Madison, Marion, Mercer, Nelson, Rockcastle, Taylor and Washington.
2. The mailing address of Applicant is P. O. Box 87, Danville, KY 40423-0087 and the physical address of Applicant is 1009 Hustonville Road, Danville, KY 40422.
3. A copy of the Applicant's Bylaws and Articles of Incorporation as amended through May 16, 2008 is enclosed (Exhibit 1).
4. Inter-County Energy Cooperative plans to construct new distribution facilities and to upgrade existing distribution facilities of Inter-County Energy Cooperative as more particularly shown in Exhibit 2 (sometimes referred to herein as the "Work Plan") and on the system maps filed with this application. Those distribution facilities will provide service to retail electric consuming facilities located in the territory certified to Inter-County Energy Cooperative for retail electric service under K.R.S. 278.016-.018.

5. The Work Plan covers the period of four years between January 1, 2009 and December 31, 2012, and was prepared by the Inter-County Cooperative Engineering Department. A copy of the Work Plan narrative and summaries is filed herein and made a part hereof as Exhibit 2.
6. The Work Plan was submitted to the Rural Electrification Administration (“REA”) in Washington, D.C. for approval, which was granted October 20, 2008 (copy included as Exhibit 3).
7. The Work Plan was approved by the Inter-County Energy Cooperative Board of Directors on November 21, 2008 (copy included as Exhibit 4).
8. Inter-County Energy Cooperative states that all the work proposed to be performed would ordinarily be exempt under K.R.S. 278.020 and 806 K.A.R. 5:001, Section 9(3) from the requirement of a Certificate of Public Convenience and Necessity. However, because the Commission has informally determined that construction of the magnitude proposed herein involves sufficient capital outlay to possibly materially affect the existing financial condition of the utility under that section, Inter-County Energy Cooperative is requesting an order pursuant to K.R.S. 278.020(1) and 807 K.A.R. 5.0012, Section 9(2), authorizing the construction proposed herein. In support thereof, Inter-County Energy Cooperative states:
 - A. The proposed new construction is or will be required by public convenience and necessity as shown in this application, in the Work Plan and in the other exhibits filed with this application.
 - B. No franchises or permits are required for the proposed construction and extensions.
 - C. A full description of the proposed locations, route or routes of the new construction and extensions, including a description of the manner in which it will be constructed, are shown in the Work Plan. The proposed new construction and extensions will not compete with any other public utilities, corporations or persons.

- D. Inter-County Energy Cooperative attaches the testimony of Marvin Graham, Vice President of Operations and Engineering, in further support of this Application (Exhibit 5).
9. Inter-County Energy Cooperative anticipates filing a loan application with REA or the National Rural Utilities Cooperative Finance (NRUFC) within the next year for long-term financing for the construction contained in the Work Plan. That financing will reimburse the general funds expended for the initial part of the Work Plan and finance the balance of the construction. Inter-County Energy Cooperative will request Commission approval for supplemental financing.
 10. Inter-County Energy Cooperative files with the original of this Application and makes a part hereof three (3) copies of the complete Work Plan and three (3) copies of up-to-date system maps showing the location of the facilities Inter-County Energy Cooperative seeks authority to construct or upgrade. The system map is keyed to the contents of Exhibit 2, the Work Plan.
 11. The cost of operation of the proposed facilities for Inter-County Energy is shown in Exhibit 2, the Work Plan.
 12. The long-term debt required to fund the proposed Work Plan totals \$25,521,413.00. Long-term financing option from REA or NRUCFC will be evaluated. The amortization schedules for the long-term debt to be incurred will be filed with Inter-County Energy Cooperative's application for approval of that financing.
 13. The current revenues are sufficient to cover any additional operating expenses that will be incurred in relation to the Work Plan. Also, the addition of new consumers, consisting of industrial and commercial growth, should provide additional revenue to meet any additional expenses. The newer, upgrade lines should also lower line losses that will help meet the additional costs (807 K.A.R. 001, Section 9(2)(f)).

WHEREFORE, Inter-County Energy Cooperative respectfully requests the Commission to make its order issuing a Certificate of Convenience and Necessity authorizing Inter-County Energy Cooperative to proceed with the construction of facilities referred to above, and for such other relief as the Commission may deem appropriate or to which Inter-County Energy Cooperative may appear entitled.

A handwritten signature in black ink, appearing to read "James William Barnett", written over a horizontal line.

JAMES WILLIAM BARNETT

Sheehan, Barnett, Dean & Pennington

P. O. Box 1517 • Danville, KY 40422

(859) 236-2641

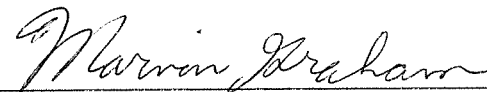
Counsel for Inter-County Energy Cooperative

COMMONWEALTH OF KENTUCKY

COUNTY OF BOYLE

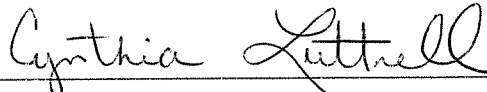
I, Marvin Graham, state that I am the Vice President of Operations and Engineering at Inter-County Energy Cooperative, that I have personal knowledge of the matters set forth in this Application and attached Exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 30th day of March, 2009



Marvin Graham
Vice President-Operations and Engineering

SUBSCRIBED AND SWORN to before me by Marvin Graham on the 30th day of March, 2009.



Notary Public, Kentucky State at Large

My Commission Expires: July 15, 2009

APPLICATION FOR CERTIFICATE OF CONVENIENCE AND NECESSITY


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Exhibit 1	Applicant's Bylaws and Articles of Incorporation As Amended Through May 16, 2008
Exhibit 2	2009-2012 Construction Work Plan
Exhibit 3	REA Work Plan Approval
Exhibit 4	Board Resolution Approving 2009-2012 Construction Work Plan
Exhibit 5	Testimony of Marvin Graham

Bylaws and Articles of Incorporation

As amended through May 16, 2008



A Touchstone Energy Cooperative 

P.O. Box 87
Danville, Kentucky 40423-0087
(859) 236-4561 • 1-888-266-7322

INTER-COUNTY ENERGY COOPERATIVE CORPORATION BYLAWS

ARTICLE I MEMBERSHIP

SECTION 1. Requirements for Membership.

1.01. Eligibility. Any natural person, firm, association, corporation, or body politic or political subdivision or agency thereof (each hereinafter referred to as "person," "applicant," "his," "him," or "her") shall be eligible to become a member of, and, at one or more premises owned or directly occupied or used by him, to receive electric service from Inter-County Energy Cooperative Corporation (hereinafter called the "Cooperative"); however, no person shall hold more than one voting membership in the Cooperative.

1.02. Application for Membership. Application for membership — wherein the applicant shall agree to purchase electric power and energy from the Cooperative and be bound by and to comply with all provisions of the Cooperative's Articles of Incorporation, Bylaws, and all rules, rate schedules and regulations as they now exist or may hereafter be adopted or amended by the Board of Directors (the obligations embraced by such agreement being hereinafter called "membership obligation") — shall be made in writing on such form as is provided therefor by the Cooperative. With respect to any particular classification of service for which the Board of Directors shall require it, such application shall be accompanied by a supplemental contract, executed by the applicant on such form as is provided therefor by the Cooperative. The membership application shall be accompanied by the membership fee provided for in Section 4, together with any service security deposit, service connection deposit or fee, facility extension fee or contribution in aid of construction (hereinafter referred to as "other deposits or fees") that may be required by the Cooperative, which membership fee and other deposits or fees shall be refunded in the event the application is denied by the board.

1.03. Acceptance Into Membership. Upon complying with the requirements set forth in Section 1.02, any applicant shall automatically become a member on the date of his connection for electric service; PROVIDED, that the Board of Directors may by resolution deny an application and refuse to extend service upon its determination after due hearing if the applicant requests a hearing, that the applicant is not willing or is not able to satisfy and abide by the Cooperative's terms and conditions of membership or that such application should be denied for other good cause; PROVIDED FURTHER, that any person whose application has been denied or, for sixty (60) days or longer, has been submitted but not denied by the Board of Directors and who has not been connected by the Cooperative for electric service may, by filing written request therefor with the Cooperative at least thirty (30) days prior to the next meeting of the Board of Directors, have his application submitted to and approved or disapproved by the vote of the Directors at such meeting. Any application not denied by the Board of Directors hereunder shall be deemed to have been accepted.

1.04. Joint Membership. A husband and wife may apply for a joint membership. The words "member," "applicants," "persons," "his," "him," or "her," as used in these Bylaws, shall include a husband and wife applying for or holding a joint membership, unless clearly distinguished in the text; and all provisions relating to the rights, powers, terms, conditions, obligations, responsibilities and liabilities of membership shall apply equally, severally and jointly to them. Without limiting the generality of the foregoing:

- (a) The presence at a meeting of either or both shall constitute the presence of one member and a joint waiver of notice of the meeting, and a revocation of any proxy or mailed vote executed or mailed by either or both;
- (b) the vote of either or both shall constitute, respectively, one joint vote;
- (c) notice to, or waiver of notice signed by either or both shall constitute, respectively, a joint notice or waiver of notice;
- (d) suspension or termination in any manner of either shall constitute, respectively, suspension or termination of the joint membership;
- (e) each, but not both concurrently, shall be eligible to serve as a director of the Cooperative, but only if both meet the qualifications required therefor; and
- (f) neither will be permitted to have any additional service connections except through their one joint membership.

1.05. Conversion of Membership. Membership may be converted to a joint membership upon the written request of the holder thereof and the agreement by such holder and his or her spouse to comply with the Articles of Incorporation, Bylaws, and Rules and Regulations adopted by the board. The outstanding membership certificate shall be surrendered, and shall be reissued by the Cooperative in such manner as shall indicate the changed membership status.

Upon the death of either spouse who is a party to the joint membership, such membership shall be held solely by the survivor and capital credits provided for under Article XII, Section 2 shall be assigned to the survivor. In the event of divorce the capital credits shall be assigned in accordance with the decree of divorce. The outstanding membership certificate shall be surrendered in the event of death of the spouse or of divorce, and shall be reissued in such manner as shall indicate the changed membership status, provided however, that neither spouse, including the estate of a deceased spouse, shall be released from any debts due the Cooperative.

SECTION 2. Membership Certificates. Membership in the Cooperative shall be evidenced by a membership certificate which shall be in such form and shall contain such provision as shall be determined by the board. Such certificate shall be signed by the Chairman and by the Secretary of the Cooperative and the corporate seal shall be affixed thereto. No membership certificate shall be issued for less than the membership fee fixed in these bylaws, nor until such membership fee has been fully paid. In case a certificate is lost, destroyed, or mutilated a new certificate may be issued therefor upon such uniform terms and indemnity to the Cooperative as the board may prescribe. No membership certificate shall be transferable, except as provided in these Bylaws.

SECTION 3. Membership Fees. The membership fee shall be set by the Board of Directors. Upon payment of same the applicant shall be eligible for membership and service. Under policies of general application, membership fees may be transferred or, upon termination of the membership, refunded; provided, however, no interest on membership fees shall be paid or payable, and all debts due the Cooperative shall have been paid.

SECTION 4. Purchase of Electric Energy. The Cooperative shall use reasonable diligence to furnish its members with adequate and dependable electric service, although it cannot and therefore does not guarantee a continuous and uninterrupted supply thereof; and each member, for so long as such premises are owned or directly occupied or used by him, shall purchase from the Cooperative all electric energy used on the premises specified in his application for membership, and shall pay therefor at rates which shall from time to time be fixed by the board. It is expressly understood that amounts paid for electric energy in excess of the cost of service are furnished by the members as capital to the Cooperative and each member shall be credited with the capital so furnished (without interest) on the books of the Cooperative as provided in these Bylaws. Each member shall pay such minimum amount regardless of the amount of electric energy consumed, as shall be fixed by the board from time to time. Each member shall also pay all amounts owed by him to the Cooperative as and when the same shall become due and payable.

SECTION 5. Wiring of Premises; Responsibility Therefor; Responsibility for Meter Tampering or Bypassing and for Damage to Cooperative Properties; Extent of Cooperative Responsibility; Indemnification. Each member shall cause all premises receiving electric service pursuant to his membership to become and to remain wired in accordance with the specification of the Kentucky Fire Insurance Underwriters Association, the National Electric Code, any applicable state code or local government ordinances, and of the Cooperative. If the foregoing specifications are variant, the more exacting standards shall prevail. Each member shall be responsible for and shall indemnify the Cooperative and its employees, agents and independent contractors against death, injury, loss or damage resulting from any defect in or improper use or maintenance of such premises and all wiring and apparatuses connected thereto or used thereon. Each member shall make available to the Cooperative a suitable site, as determined by the Cooperative, whereon to place the Cooperative's physical facilities for the furnishing and metering of electric service and shall permit the Cooperative's authorized employees, agents and independent contractors to have access thereto safely and without interference from hostile animals or any other hostile source for meter reading, bill collecting and for inspection, maintenance, replacement, relocation, repair

or disconnection of such facilities at all reasonable times. As part of the consideration for such service, each member shall be the Cooperative's bailee of such facilities and shall accordingly desist from interfering with, impairing the operation of or causing damage to such facilities, and shall use his best efforts to prevent others from so doing. Each member shall also provide such protective devices to his premises, apparatuses or meter base as the Cooperative shall from time to time require in order to protect the Cooperative's physical facilities and their operation and to prevent any interference with or damage to such facilities. In the event such facilities are interfered with, impaired in their operation or damaged by the member, or by any other person when the member's reasonable care and surveillance should have prevented such, the member shall indemnify the Cooperative and its employees, agents and independent contractors against death, injury, loss or damage resulting therefrom, including but not limited to the Cooperative's cost of repairing, replacing or relocating any such facilities and its loss, if any, of revenues resulting from the failure or defective functioning of its metering equipment. The Cooperative shall, however, in accordance with its applicable service rules and regulations, indemnify the member for any overcharges for service that may result from a malfunctioning of its metering equipment or any error occurring in the Cooperative's billing procedures. In no event shall the responsibility of the Cooperative for furnishing electric service extend beyond the point of delivery, being the point where the Cooperative's line physically connects to the member's facilities.

SECTION 6. Member to Grant Easements to Cooperative. Each member shall, upon being requested so to do by the Cooperative, execute and deliver to the Cooperative grants of easement or right-of-way over, on and under such lands owned or leased by or mortgaged to the member, and in accordance with such reasonable terms and conditions, as the Cooperative shall require for the furnishing of electric service to him or other members or for the construction, operation, maintenance or relocation of the Cooperative's electrical facilities.

SECTION 7. Termination of Membership.

(a) **Withdrawal.** Any member may withdraw from membership upon compliance with such uniform terms and conditions as the board may prescribe.

(b) **Suspension and Expulsion.** The board may, by the affirmative vote of not less than two-thirds of all the members of the board, expel any member who fails to comply with any of his membership obligations, including the provisions of the articles of incorporation, bylaws, or rules or regulations adopted by the board, but only as set out herein. The member shall be given written notice by the Cooperative of the obligation with which it alleges the member has failed to comply and shall be given written notice that such failure makes him liable to expulsion.

Upon his failure after the expiration of ten (10) days after such notice of noncompliance to pay any amounts due the Cooperative or to cease any other noncompliance with his membership obligations within the time limit contained in the said notice, a person's membership shall automatically be suspended; and he shall not during such suspension be entitled to receive electric service from the Cooperative or to cast a vote at any meeting of the members. Payment of all amounts due the Cooperative, including any additional charges required for such reinstatement, and/or cessation of any other noncompliance with his membership obligations within the time limit provided in such notice shall automatically reinstate the membership, in which event the member shall thereafter be entitled to receive electric service from the Cooperative and to vote at the meetings of its members.

Upon failure of a suspended member to be automatically reinstated to membership, as provided in this Section, he may, without further notice, but only after due hearing if such is requested by him, be expelled by resolution of the Board of Directors at any subsequently held regular or special meeting of the board. Any expelled member may be reinstated by vote of the board or by vote of the members at any annual or special meeting. Nothing contained herein shall be construed to impair the right of the Cooperative to cut off service to any member for non-payment of the utility bill upon ten (10) days notice of delinquency and impending cutoff.

(c) **Cancellation.** The membership of a member who for a period of six (6) months after service is available to him, has not purchased electrical energy from the Cooperative, or of a member who has ceased for six (6) months to purchase energy from the Cooperative may be cancelled by resolution of the board.

(d) **Death or cessation of existence.** Upon the death of a member, or upon the dissolution of a corporate member, including a partnership, association or body politic, membership shall terminate automatically.

(e) Upon the cancellation of a membership as herein provided, and upon the withdrawal, death, cessation of existence or expulsion of a member, the

membership certificate of such member shall terminate, and the membership of such member shall be surrendered forthwith to the Cooperative. Termination of membership in any manner shall not release a member or his estate from any debts due the Cooperative.

(f) In cases of withdrawal or termination of membership in any manner, the Cooperative shall repay to the member the amount of the membership fee paid by him, provided, however, that the Cooperative shall deduct from the amount of the membership fee the amount of debts or obligations owed by the member to the Cooperative.

**ARTICLE II
RIGHTS AND LIABILITIES OF MEMBERS**

SECTION 1. Property Interest of Members. Upon dissolution, after

(a) All debts and liabilities of the Cooperative shall have been paid, and

(b) All capital furnished through patronage shall have been retired as provided in these Bylaws, the remaining property and assets of the Cooperative shall be distributed among the members eligible under law in the proportion which the aggregate patronage of each bears to the total patronage of all members.

SECTION 2. Non-Liability for Debts of the Cooperative. The private property of the members shall be exempt from execution or other liability for the debts of the Cooperative and no member shall be liable or responsible for any debts or liabilities of the Cooperative.

**ARTICLE III
MEETINGS OF MEMBERS**

SECTION 1. Annual Meeting. The annual meeting of the members shall be held between the first day of May and the fifteenth day of September each year, beginning with the year 1968, at such place within one of the counties served by the Cooperative, as selected by the board and which shall be designated in the notice of the meeting, for the purpose of electing board members, passing upon reports for the previous fiscal year and transacting such other business as may come before the meeting. It shall be the responsibility of the board to make adequate plans and preparations for the annual meeting. Failure to hold an annual meeting of the members shall not work a forfeiture or dissolution of the Cooperative.

SECTION 2. Special Meetings. Special meetings of the members may be called by resolution of the board, or upon a written request signed by a majority of the board, by the Chairman, or petition signed by not less than ten per cent of all the members of the cooperative; and it shall thereupon be the duty of the Secretary to cause notice of such meeting to be given as hereinafter provided. Special meetings of the members may be held at any place within one of the counties served by the Cooperative as designated by the board, on such date, not sooner than thirty-five (35) days after the call for such meeting is made or a petition therefor is filed, and beginning at such hour as shall be designated by the Secretary or those calling or petitioning for the same.

SECTION 3. Notice of Members' Meetings. Written or printed notice stating the place, day and hour of the meeting, and in case of a special meeting or an annual meeting at which business requiring special notice is transacted, the purpose or purposes for which the meeting is called, shall be delivered to each member in person or by mail not less than five (5) days nor more than forty-five (45) days before the date of the meeting. Any such notice delivered by mail may be included with member service billings or as an integral part of or with the Cooperative's monthly newsletter and/or its monthly insert, if any, in the Kentucky Living, and notice by mail shall be deemed to be delivered when it has been deposited in the United States mail addressed to the member at his address shown on the Cooperative's records, postage prepaid and postmarked at least five (5) days prior to the meeting date. In making such computation, the date of the meeting shall not be counted. The incidental and non-intended failure of any member to receive a notice deposited in the mail addressed to the member at his address as shown on the Cooperative's records shall not invalidate any action which may be taken by the members at any such meeting, and the attendance in person of a member at any meeting of the members shall constitute a waiver of notice of such meeting unless such attendance shall be for the express purpose of objecting to the transaction of any business, or one or more items of business, on the ground that the meeting shall not have been lawfully called or convened. Any member attending any meeting for the purpose of making such objection shall notify the Secretary or credentials and elections officer prior to or at the beginning of the meeting of his objection.

SECTION 4. Quorum. Business may not be transacted at any meeting of the members unless there are present in person at least one percent (1%) of the then-total members of the Cooperative, except that, if less than a quorum is present at any meeting, a majority of those present in person may without further notice adjourn the meeting to another time and date not less than thirty (30) days later and to any place in one of the counties in Kentucky within which the Cooperative serves; PROVIDED, that the Secretary shall notify any absent members of the time, date and place of such adjourned meeting by delivering notice thereof as provided in Section 3. At all meetings of the members, whether a quorum be present or not, the Secretary shall annex to the meeting minutes, or incorporate therein by reference, a list of those members who were registered as present in person.

SECTION 5. Voting. Each member shall be entitled to only one vote upon each matter submitted to a vote at a meeting of the members. All questions other than the election of board members, which is specially provided for in these Bylaws, shall be decided by a vote of a majority of the members voting thereon, except as otherwise provided by law or in the Articles of Incorporation or these Bylaws. Members may not cumulate their votes.

SECTION 6. Proxies. At the meetings of members, a member may vote by proxy executed in writing by the member. Such proxy shall be filed with the Secretary or credentials and elections officer or their designated agent at least 36 hours before the time of the meeting for which it is proposed to be used. No proxy shall be voted at any meeting of the members unless it shall designate the particular meeting at which it is to be voted, and no proxy shall be voted at any meeting other than the one so designated or any adjournment or adjournments of such meeting. No member shall vote as proxy for more than three (3) members at any meeting of the members except where such person is exercising a proxy in connection with the borrowing of funds from the United States of America, the National Rural Utilities Cooperative Finance Corporation, and any other Agency where mortgage arrangements can be accommodated and approved by the Rural Utilities Service, or a sale, mortgage, lease or other disposition or encumbrance of property to United States of America or any agency or instrumentality thereof, the National Rural Utilities Cooperative Finance Corporation, and any other Agency, where mortgage arrangements can be accommodated and approved by the Rural Utilities Service, or in connection with the raising of the debt limit of the Cooperative or an amendment to the Articles of Incorporation thereof. No proxy shall be valid after sixty (60) days from the date of its execution. The presence of a member at a meeting of the members shall revoke a proxy theretofore executed by him and such member shall be entitled to vote at such meeting in the same manner and with the same effect as if he had not executed a proxy.

Any mailed proxies not otherwise dated shall be deemed dated as postmarked if postmark is satisfactorily evidenced. Any proxy valid at any meeting shall be valid at any adjournment thereof unless the proxy itself specifies otherwise or is subsequently revoked by another proxy or by the presence in person of the member of such adjournment. A proxy may be unlimited as to the matters of which it may be voted or it may be restricted; a proxy containing no restriction shall be deemed to be unlimited. In the event a member executes two or more proxies for the same meeting or for any adjournment thereof, the most recently dated proxy shall revoke all others; if such proxies carry the same date and are held by different persons, none of them will be valid or recognized.

SECTION 7. Members to Register With Credentials and Elections Officer. Credentials and Elections Committee.

(a) Not less than one hundred (100) nor more than one hundred and thirty-five (135) days before the annual meeting of the members, the Board of Directors shall appoint a credentials and elections officer who may be the secretary of the board or any other person designated by the board. It is the duty of each member attending a meeting of the members to make his presence known by registering with the credentials and elections officer or person designated by the board before or at the time the meeting is called to order.

(b) The credentials and elections officer's record of the names of members registered with him shall be prima facie evidence of the presence in person of such members at the meeting and with the list of the proxies filed shall serve as the roll of members present at the meeting. Said roll, certified by the Secretary, shall be filed by him with the records of the corporation.

(c) On the day and prior to the hour for the meeting, the credentials and elections officer or other person designated by the board shall be responsible for providing at the place of meeting conveniently located and clearly marked, tables or desks at which he or his agents shall be present to register members attending in person, and to receive and file proxies; and sufficient opportu-

nity shall be given for registering in person and the filing of proxies.

(d) The board shall consider before each annual or special meeting of members whether it is necessary to appoint a credentials and elections committee. If a petition has been filed under the provisions of Article IV, Section 5 of these Bylaws nominating a member to serve as director or if the board deems it necessary, because of contested matters on the agenda or other good cause, the Board of Directors shall, pursuant to the provisions hereinafter set out, at least fifty-five (55) days before any meeting of the members, appoint a Credentials and Elections Committee. The Committee shall consist of an uneven number of Cooperative members not less than three (3) nor more than five (5) who are not members of the Nominating Committee or existing Cooperative employees, agents, officers, directors or known candidates for director, and who are not close relatives or members of the same household thereof. In appointing the Committee, the board shall have regard for the equitable representation of the several areas served by the Cooperative. The Committee shall elect its own Chairman and Secretary prior to the member meeting. It shall be the responsibility of the Committee to establish or approve the manner of conducting member registration and any ballot or other voting, to pass upon all questions that may arise with respect to the registration of members in person, to count all ballots or other votes cast in any election or in any other matter, to rule upon the effect of any ballots or other vote irregularly or indecisively marked or cast, to rule upon all other questions that may arise relating to member voting and the election of directors (including but not limited to the validity of petitions of nomination, proxies, or the qualifications of candidates and the regularity of the nomination and election of directors), and to pass upon any protest or objection filed with respect to any election or affecting the results of any election. In the exercise of its responsibility, the Committee shall have available to it the advice of counsel provided by the Cooperative. In the event a protest or objection is filed concerning any election, such protest or objection must be filed during, or within three (3) business days following the adjournment of the meeting in which the voting is conducted. The committee shall thereupon be reconvened, upon notice from its Chairman, not less than seven (7) days after such protest or objection is filed. The Committee shall hear such evidence as is presented by the protestor(s) or objector(s), who may be heard in person, by counsel, or both, any opposing evidence; and the Committee, by a vote of a majority of those present and voting, shall, within a reasonable time but not later than thirty (30) days after such hearing, render its decision, the result of which may be to affirm the election, to change the outcome thereof, or to set it aside. The Committee may not affirmatively act on any matter unless a majority of the Committee is present. The Committee's decision (as reflected by a majority of those actually present and voting) on all matters covered by this Section shall be final.

SECTION 8. Order of Business. The order of business at the annual meeting of members, and so far as possible at all other meetings of members, shall be substantially as follows:

1. The call to order and report on the number of members present in person and by proxy in order to determine the existence of a quorum.
2. Reading of the notice of the meeting and proof of the due publication or mailing thereof, or the waiver or waivers of notice of the meeting, as the case may be.
3. Reading of unapproved minutes of previous meetings of the members and the taking of necessary action thereon.
4. Presentation and consideration of reports of officers, board members, and committees.
5. Election of board members.
6. Unfinished business.
7. New business.
8. Adjournment.

Notwithstanding the foregoing, the Board of Directors or the members themselves may from time to time establish a different order of business for the purpose of assuring the earlier consideration of and action upon any item of business the transaction of which is necessary or desirable in advance of any other item of business; PROVIDED, that no business other than adjournment of the meeting to another time and place may be transacted until and unless the existence of a quorum is first established and is present at the time of any vote.

SECTION 9. Agenda. No proposal from a member or group of members shall be voted upon at the annual meeting unless it has been placed on the agenda at least thirty (30) days prior to the date of the meeting. Any legitimate proposal may be placed on the agenda by any member by filing a copy of the proposal with the

Secretary within the time allowed, with a request that it be submitted to the annual meeting for consideration.

SECTION 10. Approval of Minutes. At the first meeting of the board following a meeting of the members, or as soon thereafter as may be convenient, the minutes of the last meeting of the members shall be read, and after corrections, if any, approved and so subscribed by the Chairman, the Chairman pro tem of the meeting, if there was one, and the Secretary.

ARTICLE IV BOARD OF DIRECTORS (the "Board")

SECTION 1. General Powers. The business and affairs of the Cooperative shall be managed by a board of seven directors, (hereinafter called "board members"), which shall represent the Cooperative as a whole, and shall exercise all its powers except such as are by law, the Articles of Incorporation or these Bylaws conferred upon or reserved to the members.

SECTION 2. Districts. To ensure the distribution of board members throughout the area served by the Cooperative, the territory served or to be served by it shall be divided into districts from which board members shall be elected from time to time as provided for in these Bylaws. The original districts, and the number of directors to be elected from each are:

Name of District	Counties in District	Number of Directors
Boyle	Boyle	One
Mercer	Mercer & Washington	One
Marion	Marion, Nelson & LaRue	One
Casey	Casey & Taylor	One
Lincoln	Lincoln & Rockcastle	One
Garrard	Garrard & Madison	Two

Not less than sixty (60) days before any meeting of the members at which board members are to be elected, the board shall review the composition of the several districts, and if it finds the best interests of the Cooperative and its members will be served thereby, shall reconstitute the districts forthwith.

SECTION 3. Qualifications. No person shall be eligible to become or remain a board member of the Cooperative who:

- is not a member in good standing of the Cooperative and bona fide resident of the particular district served by the Cooperative from which he / she is elected;
- is in any way employed by or has a substantial financial interest in a competing enterprise or a business selling electric energy, or supplies to the Cooperative, or a business primarily engaged in selling electrical or plumbing appliances, fixtures or supplies to members of the Cooperative;
- is an employee of the Cooperative, a retired or former employee or is a close relative of an employee of the Cooperative or of an incumbent director of the Cooperative;
- is not a United States Citizen; or
- has a felony conviction.

Notwithstanding any of the foregoing provisions of this Section treating with close relative relationships, no incumbent director shall lose eligibility to remain a director or to be re-elected as a director if he becomes a close relative of another incumbent director or of a cooperative employee because of a marriage to which he was not a party.

Upon the fact being established to the satisfaction of a majority of the other board members that a board member is holding his or her office in violation of any of the foregoing provisions, such other board members, acting as the board, shall proceed to remove such board member from office. Nothing contained in this section shall affect in any manner whatsoever the validity of any action at any meeting of the board, unless such action was taken with respect to a matter in which one or more of the directors have an interest adverse to that of the Cooperative.

SECTION 4. Election and Tenure. Board members shall be elected by ballot, by the members-at-large at the annual meeting of members, or at a special meeting thereof held for that purpose within a reasonable time thereafter. They shall serve for terms of four (4) years each, ending with the fourth annual meeting following election, and until their successor shall have been elected and shall have qualified. The four (4) year term for each director shall begin at the expiration of the current director's three (3) year term in existence at the time of adoption of this amendment to the bylaws.

Board members whose terms are expiring are eligible for immediate re-election.

The election of board members shall be by written ballot, except when a candidate is unopposed the election shall be by voice vote. The ballots shall list the candidates nominated according to districts, giving their names and addresses. Each member of the Cooperative present shall be entitled to vote for one candidate from each district. The candidate from each district receiving the highest number of votes at the meeting shall be considered elected a board member. Drawing by lot shall resolve, where necessary, any tie votes.

SECTION 5. Nominations. It shall be the duty of the Board of Directors to appoint, not less than one hundred (100) nor more than one hundred and thirty-five (135) days prior to the date of a meeting of the members at which directors are to be elected, a Committee on Nominations, consisting of not less than seven (7) nor more than fourteen (14) members of the Cooperative who are not existing Cooperative employees, agents, officers, directors or known candidates for directors, who are not close relatives or members of the same household thereof, and who are so selected that each of the Cooperative's Directorate Districts shall have representation thereon in proportion to the number of authorized directors from or with respect to such District. The Committee shall meet within fourteen (14) days of its appointment and shall prepare and post at the principal office of the Cooperative at least eighty-six (86) days prior to the meeting a list of nominations for directors to be elected, listing separately the nominee(s) for each Directorate District from or with respect to which a director must, pursuant to this Article, be elected at the meeting. After the nominations of the nominating committee have been posted, and not less than sixty-five (65) days before the meeting any one hundred (100) or more members of the Cooperative, acting together may make additional nominations in writing over their signatures, listing their nominee(s) in like manner, which petition shall be filed in a sealed envelope clearly identified as a petition at the Cooperative's headquarters building on Hustonville Road, Danville, Kentucky or placed in the night depository box at the headquarters prior to 5:00 p.m. of the last day to file. Cooperative personnel receiving the sealed petition shall deliver same without breaking the seal to the Credentials and Elections Officer provided for in Article III, Section 7(a) of the Bylaws who shall receipt for same and safeguard same in the Cooperative's vault until such time as the Credentials and Elections Committee provided for under Article III, Section 7(d) has been appointed. After the said Credentials and Elections Committee has been appointed and called together for a meeting which shall be within fourteen (14) days from the date of its appointment, the Credentials and Elections Officer, or his duly authorized agent, shall deliver the sealed petition to the Credentials and Elections Committee for its review to determine its adequacy under the Bylaws. If the said Committee determines that the petition is adequate in all respects under the Bylaws and is signed by the required number of members then the Secretary shall post such nomination at the same place where the list of nominations by the Committee on Nominations is posted.

If the Credentials and Elections Committee determines that the petition is inadequate under the Bylaws then said committee will immediately notify the proposed nominee of its decision and the reasons why the petition is inadequate. If the said nominee wishes to appeal the said committee's ruling then an appeal shall be filed in writing with the said committee chairman stating the reason for the appeal within four (4) days of the date of notification. The Credentials and Elections Committee shall meet within four (4) days of receipt of such an appeal to determine the merits of same. Both the said nominee and any other candidate for the office shall be allowed to be present at the meeting to present evidence either personally or through counsel. The Credentials and Elections Committee shall rule upon the appeal and its decision shall be final. No additional nominations for board members from a particular district shall be made from the floor of the annual meeting.

SECTION 6. Voting for Directors; Validity of Board Action. In the election of directors, each member shall be entitled to cast the number of votes (but not cumulatively) which corresponds to the total number of directors to be elected, but no member may vote for more nominees than the number of directors that are to be elected from or with respect to any particular Directorate District. Ballots marked in violation of the foregoing restriction with respect to one or more Directorate Districts shall be invalid and shall not be counted with respect to such District or Districts. Notwithstanding the provisions contained in this Section, failure to comply with any of such provisions shall not affect in any manner whatsoever the validity of any action taken by the Board of Directors after the election of directors.

SECTION 7. Removal of Directors by Members. Any member(s) may bring one or more charges for cause against any one or more directors and may request the removal of such director(s) by reason thereof by filing with the Secretary

such charge(s) in writing signed by said member(s), together with a petition signed by not less than ten per cent (10%) of the then-total members of the Cooperative, which petition calls for a special member meeting the stated purpose of which shall be to hear and act upon such charge(s), and which specifies the place, time and date thereof not sooner than twenty-five (25) days after the filing of such petition. Each page of the petition shall, in the forepart thereof, state the name(s) and address(es) of the member(s) filing such charge(s), a verbatim statement of such charge(s) and the name(s) of the director(s) against whom such charge(s) is (are) being made. The petition shall be signed by each member in the same name as he is billed by the Cooperative and shall state the signatory's address as the same appears on such billings. A statement of such charge(s) verbatim, the name(s) of director(s) against whom the charge(s) have been made, of the member(s) filing the charge(s) and the purpose of the meeting shall be contained in the notice of the meeting; PROVIDED, that the notice shall set forth (in alphabetical order) only twenty (20) of the names of the members filing one or more charges if twenty (20) or more members file the same charge(s) against the same director(s). Such director(s) shall be informed in writing of the charge(s) after they have been validly filed and at least twenty (20) days prior to the meeting of the members at which the charge(s) are to be considered, and shall have an opportunity at the meeting to be heard in person, by witnesses, by counsel or any combination of such, and to present evidence in respect to the charge(s); and the person(s) bringing the charge(s) shall have the same opportunity, but must be heard first. The question of the removal of such director(s) shall, separately for each if more than one has been charged, be considered and voted upon at such meeting; PROVIDED, that the question of the removal of a director shall not be voted upon at all unless some evidence in support of the charge(s) against him shall have been presented during the meeting through oral statements, documents or otherwise, with the ruling concerning same to be made by the chairman of the special meeting. The chairman of the said meeting shall be a licensed attorney appointed by the attorney to the board, and the Cooperative shall compensate him for his services. If a director is removed pursuant to this action, the vacancy created by such removal shall be filled by the Board of Directors.

SECTION 8. Vacancies. All vacancies occurring in the Board of Directors shall be filled by the Board of Directors. A director thus elected shall serve out the unexpired term of the director whose office was originally vacated, until a successor is elected and qualified; PROVIDED, that such a director shall be from or with respect to the same Directorate District as was the director whose office was vacated.

SECTION 9. Absence from Meetings. Any board member who is absent from three (3) consecutive regular meetings of the board, unless excused by the affirmative vote of a majority of the other board members, shall be deemed to have vacated his office. After declaring the vacancy to exist, the remaining board members shall proceed to fill the vacancy.

SECTION 10. Compensation. Board members shall not receive any salary for their services as such, except that the board may by resolution authorize a per diem to be paid for each day or portion thereof spent on cooperative business, such as attendance of meetings, conferences, and training programs; or when authorized by the board, in performing committee assignments. Board members may also be reimbursed for expenses actually and necessarily incurred in carrying out such Cooperative business, or by action of the board may be granted a reasonable per diem allowance in lieu of a detailed accounting for some of these expenses. No board member shall receive compensation for serving the Cooperative in any other capacity, nor shall a close relative of a board member receive compensation for serving the Cooperative, unless the payment and amount of compensation shall be specifically authorized by the members, or shall be certified by the affirmative vote of a majority of the board members not involved therein, taken before or after such service is rendered, as an emergency measure or a special case; PROVIDED, that a director who is also an officer of the board, and who as such officer performs regular or periodic duties of a substantial nature for the Cooperative in its fiscal affairs, may be compensated in such amount as shall be fixed and authorized in advance of such service by the Board of Directors; and PROVIDED FURTHER, that an employee shall not lose his eligibility to continue in the employment of the Cooperative if he becomes a close relative of a director because of a marriage to which he was not a party.

SECTION 11. Rules, Regulations, Rate Schedules and Contracts. The Board of Directors shall have power to make, adopt, amend, abolish and promulgate such rules, regulations, rate classifications, rate schedules, contracts, security deposits and any other types of deposits, payments or charges, including contributions in aid of construction, not inconsistent with law or the Cooperative's Articles of Incorporation or Bylaws, as it may deem advisable for the management, admin-

istration and regulation of the business and affairs of the Cooperative.

SECTION 12. Accounting System and Reports. The Board of Directors shall cause to be established and maintained a complete accounting system of the Cooperative's financial operations and condition, and shall, after the close of each fiscal year, cause to be made a full, complete and independent audit of the Cooperative's accounts, books and records reflecting financial operations during, and financial condition as of the end of, such year. A full and accurate summary of such audit reports shall be submitted to the members at or prior to the succeeding annual meeting of the members. The board may authorize special audits, complete or partial, at any time and for any specified period of time.

SECTION 13. "Close Relative" Defined. As used in these Bylaws, "close relative" means a person who, by blood or in law, including half, foster, step and adoptive kin, is either a spouse, child, grandchild, parent, grandparent, brother, sister, aunt, uncle, nephew or niece of the principal.

ARTICLE V MEETINGS OF BOARD OF DIRECTORS

SECTION 1. Regular Meetings. A regular meeting of the Board of Directors shall be held, without notice, immediately after the adjournment of the annual meeting of the members, or as soon thereafter as conveniently may be, at such site as designated by the board in advance of the annual member meeting; PROVIDED, however, that failure to hold such meeting shall not affect in any manner whatsoever the validity of any action subsequently taken by the board. A regular meeting of the board shall also be held monthly at such time and place within one of the counties served by the Cooperative as designated by the board. Such regular monthly meeting may be held without notice other than that of the resolution fixing the time and place thereof.

SECTION 2. Special Meetings. A special meeting of the Board of Directors may be called by the Board of Directors, by the Chairman or by any four (4) directors, and it shall thereupon be the duty of the Secretary to cause notice of such meeting to be given as hereinafter provided in Section 3. The board, the Chairman, or the directors calling the meeting shall fix the date, time and place for the meeting, which shall be held in one of the counties in Kentucky within which the Cooperative serves, unless all directors consent to its being held in some other place in Kentucky or elsewhere. Special meetings, upon proper notice as otherwise provided in Section 3, may also be held via telephone conference call, without regard to the actual location of the directors at the time of such telephone conference meeting, if all the directors consent thereto.

SECTION 3. Notice of Directors Meeting Written notice of the date, time, place (or telephone conference call) and purpose or purposes of any special meeting of the board and, when the business to be transacted thereat shall require such, of any regular meeting of the board shall be delivered to each director not less than five (5) days prior thereto, either personally or by mail, by or at the direction of the Secretary, or upon a default in this duty by the Secretary, by him or those calling it in the case of a special meeting or by any director in the case of a meeting the date, time and place of which have already been fixed by board resolution. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail, addressed to the director at his address as it appears on the records of the Cooperative, with first class postage thereon prepaid, and postmarked at least five (5) days prior to the meeting date. The attendance of a director at any meeting of the board shall constitute a waiver of notice of such meeting unless such attendance shall be for the express purpose of objecting to the transaction of any business or of one or more items of business, on the ground that the meeting shall not have been lawfully called or convened.

SECTION 4. Quorum. The presence in person of a majority of the directors in office shall be required for the transaction of business and the affirmative votes of a majority of the directors present and voting shall be required for any action to be taken unless otherwise provided by statute or these Bylaws; PROVIDED, that a director who by law or these Bylaws is disqualified from voting on a particular matter shall not, with respect to consideration of an action upon that matter, be counted in determining the number of directors in office or present; AND PROVIDED FURTHER, that, if less than a quorum be present at a meeting, a majority of the directors present may adjourn the meeting from time to time, but shall cause the absent directors to be duly and timely notified of the date, time and place of such adjourned meeting.

**ARTICLE VI
OFFICERS; MISCELLANEOUS**

SECTION 1. Number and Title. The officers of the Cooperative shall be a Chairman, Vice Chairman, Secretary, Treasurer, and such other officers as may be determined by the board from time to time. The offices of Secretary and Treasurer may be held by the same person.

SECTION 2. Election and Term of Office. The officers shall be elected by ballot, annually by and from the board at the meeting of the board held immediately after the annual meeting of the members, or as soon thereafter as it may be conveniently done. Each officer shall hold office until the first meeting of the board following the next succeeding annual meeting of the members, or until a successor shall have been elected and shall have qualified. A vacancy in any office shall be filled by the board for the unexpired portion of the term.

SECTION 3. Removal of Officers and Agents. Any officer or agent elected or appointed by the board may be removed by it whenever in its judgment the best interest of the Cooperative will be served thereby.

SECTION 4. Chairman. The Chairman shall:

- (a) be the principal executive officer of the Cooperative, and unless otherwise determined by the members of the board, shall preside at all meetings of the members and the board;
- (b) sign, with the Secretary, certificates of membership, the issue of which shall have been authorized by the board, and may sign any deeds, mortgages, deeds of trust notes, bonds, contracts or other instruments authorized by the board to be executed, except in cases in which the signing and execution thereof shall be expressly delegated by the board or by these Bylaws to some other officer or agent of the Cooperative, or shall be required by law to be otherwise signed or executed, and
- (c) in general perform all duties incident to the office of Chairman and such other duties as may be prescribed by the board from time to time.

SECTION 5. Vice Chairman. In the absence of the Chairman or in the event of his inability or refusal to act, the Vice Chairman shall perform the duties of the Chairman, and when so acting shall have all the powers of and be subject to all the restrictions upon the Chairman. The Vice Chairman shall also perform other duties as from time to time may be assigned by the board.

SECTION 6. Secretary. The Secretary shall be responsible for:

- (a) keeping or causing to be kept, the minutes of the meetings of the members and of the board in books provided for that purpose;
- (b) seeing that all notices are duly given in accordance with these Bylaws or as required by law;
- (c) the safekeeping of the corporate book and records and the seal of the Cooperative and affixing the seal of the Cooperative to all certificates of membership prior to the issue thereof, and to all documents, the execution of which on behalf of the Cooperative under its seal is duly authorized in accordance with the provisions of the Bylaws;
- (d) keeping, or causing to be kept, a register of the names and post office addresses of all members;
- (e) signing, with the Chairman, certificates of membership, the issue of which shall have been authorized by the board or the members;
- (f) have general charge of the books of the Cooperative in which a record of the members is kept;
- (g) keeping on file at all times a complete copy of the Articles of Incorporation and Bylaws of the Cooperative containing all amendments thereto (which copy shall always be open to the inspection of any member) and at the expense of the Cooperative, furnishing a copy of the Bylaws and of all amendments thereto to any member upon request; and
- (h) in general performing all duties incident to the office of Secretary and such other duties as from time to time may be assigned by the board.

SECTION 7. Treasurer. The Treasurer shall be responsible for:

- (a) custody of all funds and securities of the Cooperative;
- (b) the receipt of and the issuance of receipts for all monies due and payable to the Cooperative and for the deposit of all such monies in the name of the Cooperative in such bank or banks as shall be selected in accordance with the provisions of these Bylaws; and
- (c) the general performance of all the duties incident to the office of Treasurer and such other duties as from time to time may be assigned by the board.

(d) Notwithstanding the duties, responsibilities and authorities of the Secretary and of the Treasurer hereinbefore provided in Sections 6 and 7, the Board of Directors by resolution may, except as otherwise limited by law, delegate, wholly or in part, the responsibility and authority for, and the regular or routine administration of, one or more of each such officer's such duties to one or more agents, other officers or employees of the Cooperative who are not directors. To the extent that the board does so delegate with respect to any such officer, that officer as such shall be released from such duties, responsibilities and authorities.

SECTION 8. President/CEO. The board may appoint a President/CEO who may be, but who shall not be required to be, a member of the Cooperative. The President/CEO shall perform such duties and shall exercise such authority as the board may vest in such office from time to time.

SECTION 9. Bonds of Officers. The Treasurer and any other officer or agent of the Cooperative charged with responsibility for the custody of any of its funds or property shall be bonded in such sum and with such surety as the board shall determine. The board in its discretion may also require any other officer, agent or employee of the Cooperative to be bonded in such amount and with such surety as it shall determine.

SECTION 10. Compensation. The compensation, if any, of any officer, agent or employee who is also a director or close relative of a director shall be determined as provided in Section 10 of Article IV of these Bylaws, and the powers, duties and compensation of any other officers, agents and employees shall be fixed or a plan therefor approved by the Board of Directors.

SECTION 11. Reports. The officers of the Cooperative shall submit at each annual meeting of the members reports covering the business of the Cooperative for the previous fiscal year. Such reports shall set forth the condition of the Cooperative at the close of such fiscal year.

SECTION 12. Indemnification of President/CEO, Officers, Directors, Staff Employees and Agents. The Cooperative shall indemnify any person who was or is a party, or is threatened to be made a party to any threatened, pending, or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by, or in the right of, the Cooperative) by reason of the fact that such person is or was a President/CEO, director, officer, staff employee or agent of the Cooperative, or who is or was serving at the request of the Cooperative as a President/CEO, director, officer, staff employee or agent of another cooperative, association, corporation, partnership, joint venture, trust or other enterprise, against expenses (including all costs of defense), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, if such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the best interest of the Cooperative, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct of such person was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in, or not opposed to, the best interest of the Cooperative, and with respect to any criminal action or proceeding, had reasonable cause to believe that the conduct of such person was unlawful.

To the extent that a President/CEO, director, officer, staff employee or agent of the Cooperative has been successful, on the merits or otherwise, in the defense of any action, suit or proceeding referred to in paragraph 1, (and, in addition, actions by or in the right of, the Cooperative) of any claim, issue or matter therein, such person shall be indemnified against expenses (including all costs of defense) actually and reasonably incurred by such person in connection therewith.

The indemnity herein provided shall be co-extensive with those authorized under Kentucky Revised Statute Chapter 271B and shall be effective in accordance with all of the terms and conditions of such statute.

The Cooperative may purchase and maintain insurance on behalf of any person who is or was a President/CEO, director, officer, staff employee or agent of the Cooperative, or who is or was serving at the request of the Cooperative as a President/CEO, director, officer, staff employee or agent of another cooperative, association, corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of the status of such person as such, whether or not the Cooperative would have the power to indemnify such person against such liability under the provisions of this bylaw.

ARTICLE VII FINANCIAL TRANSACTIONS

SECTION 1. Contracts. Except as otherwise provided by law or these Bylaws, the Board of Directors may authorize any cooperative officer, agent or employee to enter into any contract or execute and deliver any instrument in the name and on behalf of the Cooperative, and such authority may be general or confined to specific instances.

SECTION 2. Checks, Drafts, etc. All checks, drafts or other orders for the payment of money, and all notes, bonds, or other evidences of indebtedness, issued in the name of the Cooperative, shall be signed or countersigned by such officer, agent or employee of the Cooperative and in such manner as shall from time to time be determined by resolution of the Board of Directors.

SECTION 3. Deposits, Investments. All funds of the Cooperative shall be deposited or invested from time to time to the credit of the Cooperative in such bank or banks or in such financial securities or institutions as the Board of Directors may select.

ARTICLE VIII WAIVER OF NOTICE

Any member or director may waive, in writing, any notice of meetings required to be given by these Bylaws. The attendance of a member or board member at any meeting shall constitute a waiver of notice of such meeting by such member or board member, except in case a member or board member shall attend a meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting has not been lawfully called or convened.

ARTICLE IX AMENDMENTS

These Bylaws may be altered, amended or repealed by the Board of Directors at any regular or special board meeting; PROVIDED, that the notice of the meeting, shall have contained a copy of the proposed alteration amendment or repeal or an accurate summary explanation thereof. A copy of each alteration, amendment or repeal shall be furnished to the Administrator of Rural Utilities Service and National Rural Utilities Cooperative Finance Corporation and notice of same shall be published in the Cooperative's monthly newsletter or the Kentucky Living within a reasonable time after adoption.

ARTICLE X RULES OF ORDER

Parliamentary procedure at all meetings of the members, of the Board of Directors, of any committee provided for in these Bylaws and of any other committee of the members or Board of Directors which may from time to time be duly established shall be governed by the most recent edition of Robert's Rules of Order, except to the extent such procedure is otherwise determined by law or by the Cooperative's Articles of Incorporation or Bylaws.

ARTICLE XI NON-PROFIT OPERATION

SECTION 1. Interest or Dividends on Capital Prohibited. The Cooperative shall at all times be operated on a cooperative non-profit basis for the mutual benefit of its patrons. No interest or dividends shall be paid or payable by the Cooperative on any capital furnished by its patrons.

SECTION 2. Patronage Capital in Connection with Furnishing Electric Energy. In the furnishing of electric energy, the Cooperative's operations shall be so conducted that all patrons will, through their patronage, furnish capital for the Cooperative. In order to induce patronage and to assure that the Cooperative will operate on a non-profit basis the Cooperative is obligated to account on a patronage basis to all its patrons for all amounts received and receivable from the furnishing of electric energy in excess of operating costs and expenses properly chargeable against the furnishing of electric energy. All such amounts in excess of operating costs and expenses at the moment of receipt of the Cooperative are received with the understanding that they are furnished by the patrons as capital. The Cooperative is obligated to pay by credits to a capital account for each patron all such amounts in excess of operating costs and expenses. The books and records

of the Cooperative shall be set up and kept in such a manner that at the end of each fiscal year the amount of capital, if any, so furnished by each patron is clearly reflected and credited in an appropriate record to the capital account of each patron, and the Cooperative shall within a reasonable time after the close of the fiscal year notify each patron of the amount of capital so credited to his account if requested. All such amounts credited to the capital account of any patron shall have the same status as though they had been paid to the patron in cash in pursuant of a legal obligation to do so and the patron had then furnished the Cooperative corresponding amounts for capital.

All other amounts received by the Cooperative from its operations in excess of costs and expenses shall, insofar as permitted by law, be

(a) used to offset any losses incurred during the current or any prior fiscal year, and

(b) to the extent not needed for that purpose, allocated to its patrons on a patronage basis, and any amount so allocated shall be included as a part of the capital credited to the accounts of patrons, as herein provided.

In the event of dissolution or liquidation of the Cooperative, after all outstanding indebtedness of the Cooperative shall have been paid, outstanding capital credits shall be retired without priority on a pro rata basis before any payments are made on account of property rights of members; PROVIDED, that insofar as gains may at that time be realized from the sale of any appreciated asset, such gains shall be distributed to all persons who were patrons during the period the asset was owned by the cooperative in proportion to the amount of business done by such patrons during that period, insofar as is practicable, as determined by the Board of Directors before any payments are made on account of property rights of members. If at any time prior to dissolution or liquidation, the Board shall determine that the financial condition of the Cooperative will not be impaired thereby, the capital credited to patrons' accounts may be retired in full or in part. Any such retirements of capital shall be made on any method of allocation, basis, priority and order of retirement that the Board in its discretion determines to be just and equitable and in furtherance of the cooperative concept.

FURTHERMORE, the Board of Directors shall have the power to adopt rules providing for the separate retirement of that portion ("power supply or other service or supply portion") of capital credited to the accounts of patrons which corresponds to capital credited to the account of the Cooperative by an organization furnishing power supply or any other service or supply to the Cooperative. Such rules shall:

(a) establish a method for determining the portion of such capital credited to each patron for each applicable fiscal year;

(b) provide for separate identification on the Cooperative's books of such portions of capital credited to the Cooperative's patrons;

(c) provide for appropriate notifications to patrons with respect to such portions of capital credited to their accounts; and

(d) preclude a general retirement of such portions of capital credited to patrons for any fiscal year prior to the general retirement of other capital credited to patrons for the same year or of any capital credited to patrons for any prior fiscal year.

Capital credited to the account of each patron shall be assignable only on the books of the cooperative pursuant to written instructions from the assignor and only to successors in interest or successors in occupancy in all or a part of such patron's premises served by the Cooperative, unless the Board of Directors, acting under policies of general application, shall determine otherwise.

Notwithstanding any other provisions of these Bylaws, the Board of Directors shall at its discretion have the power at any time upon the death of any patron who was a natural person (or, if as so provided for in the preceding paragraph, upon the death of an assignee of the capital credits of a patron, which assignee was a natural person), if the legal representatives of his estate shall request in writing that the capital so credited or assigned, as the case may be, be retired prior to the time such capital would otherwise be retired under the provisions of the Bylaws, to retire such capital immediately upon such terms and conditions as the Board of Directors, acting under policies of general application to situations of like kind, and such legal representatives, shall agree upon; PROVIDED, however, that the financial condition of the Cooperative will not be impaired thereby; and FURTHER PROVIDED that no payment of capital credits to the estate of a deceased member shall be made except to the extent said credits represent margins earned by the Cooperative or other cooperatives of which this Cooperative is a member. This shall be construed to exclude capital credits assigned after 1982, but not paid in cash by such other cooperatives, except for capital credits of which this cooperative may be reasonably assured of collection within the next seven (7) years. Separate records shall be kept of Patronage Capital received and receivable.

The Cooperative, before retiring any capital credited to any patron's account, shall deduct therefrom any amount owing by such patron to the Cooperative.

The patrons of the Cooperative, by dealing with the Cooperative, acknowledge that the terms and provisions of the Articles of Incorporation and Bylaws shall constitute and be a contract between the Cooperative and each patron, and both the Cooperative and the patrons are bound by such contract, as fully as though each patron had individually signed a separate instrument containing such terms and provisions. The provisions of this Article of the Bylaws shall be called to the attention of each patron of the Cooperative by posting in a conspicuous place in the Cooperative's offices.

ARTICLE XII DISPOSITION AND PLEDGING OF PROPERTY; DISTRIBUTION OF SURPLUS ASSETS ON DISSOLUTION

SECTION 1. Disposition of Property. The Cooperative may not sell, mortgage, lease or otherwise dispose of or encumber all or any substantial portion of its property unless such sale, mortgage, lease or other disposition or encumbrance is authorized at a meeting of the members thereof by the affirmative vote of not less than two-thirds of all the members of the Cooperative, and unless the notice of such proposed sale, mortgage, lease or other disposition or encumbrance shall have been contained in the notice of the meeting; PROVIDED, however, that notwithstanding anything therein contained, the board of the Cooperative, without authorization by the members thereof shall have full power and authority to authorize the execution and delivery of a mortgage or mortgages or a deed or deeds of trust upon, or the pledging or encumbering of, any or all the property, assets, rights, privileges, licenses, franchises and permits of the Cooperative, whether acquired or to be acquired, and wherever situated, as well as the revenues and income therefrom, all upon such terms and conditions as the board shall determine, to secure any indebtedness of the Cooperative to the United States of America or any agency or instrumentality thereof, the National Rural Utilities Cooperative Finance Corporation, and any other agency, where mortgage arrangements can be accommodated and approved by the Rural Utilities Service. A substantial portion as used in this Article shall be defined as at least ten per cent (10%) of the value of the property of the Cooperative other than merchandise and property acquired for resale during any one fiscal year.

SECTION 2. Distribution of Surplus Assets on Dissolution. Upon the Cooperative's dissolution, any assets remaining after all liabilities or obligations of the Cooperative have been satisfied and discharged shall, to the extent practicable as determined by the Board of Directors, not inconsistent with the provisions of the third paragraph of Section 2 of Article XI of these Bylaws be distributed without priority but on a patronage basis among all persons who are members of the Cooperative; PROVIDED, however, that if in the judgment of the board the amount of such surplus is too small to justify the expense of making such distribution, the board may, in lieu thereof, donate, or provide for the donation of, such surplus to one or more nonprofit charitable or educational organizations that are exempt from Federal income taxation.

ARTICLE XIII PATRON'S DUTY TO SUPPLY ADDRESS, PROCEDURE IN GIVING NOTICE MAKING DISTRIBUTIONS TO PATRONS, ABANDONMENT AND RECOVERY OF UNCLAIMED PROPERTY

SECTION 1. Duty to Supply Address. It is the duty of each patron (including in the meaning of the word "patron" members, former members, non-members and successors in interest or successors in occupancy to all or part of a patron's premises served by the Cooperative) to keep the Cooperative informed of his current address. It is the duty of the legal representative of deceased patrons to inform the Cooperative promptly of their identity and qualification and current address. In giving notices, in making payments, refunds and other distributions to patrons the Cooperative may rely solely on the last addresses given by them, their successors or legal representatives. Failure to supply such information shall constitute the waiver of any notice.

SECTION 2. Giving Notice, Making Distributions. All notices given by the Cooperative, all refunds made by it, and distributions of capital credits, patronage refunds and book equities shall be deemed to have been given when the same, or a check, draft, or certificate therefor has been deposited in the United States mail with the postage thereon prepaid, addressed to the patron or his legal representative at his last known address as shown on the records of the Cooperative.

SECTION 3. Abandonment and Recovery of Unclaimed Property. The

property in any capital credits, patronage refunds, or book equities sought to be distributed by the Cooperative to its patrons shall, be deemed to have been abandoned, and the amounts of money represented thereby may be treated as incidental income of the Cooperative for the appropriate year, either under a general rule or special resolution of the board, when checks, drafts, certificates or other instruments of distribution and payment remain in the hands of the Cooperative for a period of five (5) years after the tender thereof to the patron in person, or the mailing thereof in the manner provided for in the Bylaws, and;

- (a) acceptance of delivery has been refused and legal action has not been taken by the owner; or
- (b) the owner cannot be found, and after having been mailed to him at his last known address as provided for in these Bylaws the checks, drafts, certificates or other instruments of distribution or payment have been returned by the United States mail unclaimed, and the amounts have not been called for; or
- (c) presentment for payment or surrender for capital has not been made, or action taken by the owner to claim the right.

ARTICLE XIV SEAL

The Corporate seal of the Cooperative shall be in the form of a circle and shall have inscribed thereon the name of the Cooperative and the words "Corporate Seal, Kentucky."

ARTICLE XV CHANGE IN RATES

Written notice shall be given to the Administrator of the Rural Utilities Service of the United States of America not less than ninety (90) days prior to the date upon which any proposed change in rates charged by the Cooperative for electric energy becomes effective.

ARTICLE XVI FISCAL YEAR

The fiscal year of the Cooperative shall begin on the first day of January of each year and shall end on the thirty-first day of December of the same year.

ARTICLE XVII AREA COVERAGE

The board shall make diligent effort to see that electric energy service is extended to all unserved persons within the Cooperative service area who

- (a) desire such service, and
- (b) meet all reasonable requirements established by the Cooperative as a condition of such service.

INTER-COUNTY ENERGY COOPERATIVE CORPORATION

ARTICLES OF INCORPORATION

The incorporators whose names are hereunto signed, being natural persons and citizens of the Commonwealth of Kentucky, have executed these Articles of Incorporation for the purpose of forming a cooperative corporation not organized for pecuniary profit pursuant to the "Rural Electric Cooperative Corporation Act" which was passed by the General Assembly of Kentucky, at a Special Session, 1936, and approved on January 18, 1937, in accordance with the following provisions:

ARTICLE I

The name of the Corporation shall be, "Inter-County Energy Cooperative Corporation."

ARTICLE II

The purpose for which this corporation is formed is to engage in any and all lawful business and/or activity authorized pursuant to Kentucky law including but not limited to promote and encourage the fullest possible use of electric energy in the Commonwealth of Kentucky by making electric energy available by production, transmission or distribution, or both, to or by otherwise securing the same for the habitants of and persons in the Commonwealth of Kentucky at the lowest cost consistent with sound business methods and prudent management of the business of the Corporation and also by making available to the said inhabitants as foresaid electrical devices, equipment, wiring, appliances, fixtures and supplies and all kinds of tools, equipment and machinery, (including any fixture or property of both which may by its use be conducive to a more complete use of electricity or electric energy) operated by electricity or electric energy and, without limiting the generality of the foregoing:

(a) To generate, manufacture, purchase, acquire and accumulate electric energy for its members and non-members to the extent permitted by the Act under which the Corporation is formed, or otherwise authorized by law, and to transmit, distribute, furnish, sell and dispose of such electric energy to its members and non-members to the extent permitted by the Act under which the Corporation is formed, or otherwise permitted by law, and to construct, erect, purchase, lease as lessee and in any manner acquire, own, hold, maintain, operate, sell, dispose of, lease as lessor, exchange and mortgage plants, buildings, works, machinery, supplies, apparatus, equipment and electric transmission and distribution lines or systems necessary, convenient or useful for carrying out and accomplishing any or all of the foregoing purposes;

(b) To acquire, own, hold, use, exercise and, to the extent permitted by law, to sell, mortgage, pledge, hypothecate and in any manner dispose of franchises, rights, privileges, licenses, rights-of-way and easements necessary, useful or appropriate to accomplish any or all of the purposes of the Corporation;

(c) To purchase, receive, lease as lessee, or in any other manner acquire, own, hold, maintain, use, convey, sell, lease as lessor, exchange, mortgage, pledge or otherwise dispose of any and all real and personal property or any interest therein necessary, useful or appropriate to enable the Corporation to accomplish any or all of its purposes;

(d) To assist its members to wire their premises and install therein electrical and plumbing appliances, fixtures, machinery, supplies, apparatus and equipment of any and all kinds and character (including, without limiting the generality of the foregoing, such as are applicable to water supply and sewage disposal) and, in connection therewith and for such purposes, to purchase, acquire, lease, sell, distribute, install and repair, electrical and plumbing appliances, fixtures, machinery, supplies, apparatus and equipment of any and all kinds and character (including without limiting the generality of the foregoing, such as are applicable to water supply and sewage disposal) and to receive, acquire, endorse, pledge, guarantee, hypothecate, transfer or otherwise dispose of notes and other evidences of indebtedness and all security therefor;

(e) To borrow money, to make and issue bonds, notes and other evi-

dences of indebtedness, secured or unsecured, for monies borrowed or in payment for property acquired, or for any of the other objects, or purposes of the Corporation; to secure the payment of such bonds, notes, or other evidences of indebtedness by mortgage or mortgages, or deed or deeds, of trust upon, or by the pledge of our other lien upon any or all of the property, rights, privileges, or permits of the Corporation, wheresoever situated, acquired or to be acquired;

(f) To exercise the right of eminent domain in its corporate name, and in the manner provided by the condemnation laws for acquiring private property for public use;

(g) To do and perform either for itself or for its members any and all acts and things under, through or by means of its own officers, agents and employees or by contracts with any person, federal agency, corporation, cooperative association or municipality, and to have and exercise any and all powers as may be necessary or convenient to accomplish any or all of the foregoing purposes or as may be permitted by the act under which this corporation is formed or as may now or hereafter be authorized by law or which are not prohibited by law and to exercise any of its powers anywhere.

ARTICLE III

The principal office of the Corporation shall be located at Danville, in the County of Boyle, Commonwealth of Kentucky.

ARTICLE IV

The operations of the Corporation are to be conducted in the counties of Boyle, Mercer, Washington, Marion, Lincoln and Garrard, and in such other counties as such operations may from time to time become necessary or desirable in the interest of this corporation or its members.

ARTICLE V

The number of directors of the Corporation shall not be less than five (5) nor more than eleven (11). Unless otherwise provided in the Bylaws, the number of directors shall be seven (7).

ARTICLE VI

The names and post office addresses of the directors who are to manage and conduct the affairs of the Corporation until the first annual meeting of the members or until their successors shall have been elected and shall have qualified, are:

NAMES
William H. Rogers
Kearney Adams
P.E. Hughes
Beeler Whitlock
Robinson Cook

POST OFFICE ADDRESSES
Harrodsburg, Ky.
Lancaster, Ky.
Raywick, Ky.
Gravel Switch, Ky.
Harrodsburg, Ky.

ARTICLE VII

The duration of the Corporation is: Perpetual.

ARTICLE VIII

SECTION 1. The Corporation shall have no capital stock and the property rights and interests of each member shall be equal.

SECTION 2. Any person, firm, corporation or body politic may become a member in the Corporation by:

- (a) paying the membership fee specified by the Bylaws;
- (b) agreeing to purchase from the Corporation electric energy as specified

in the Bylaws; and

(c) agreeing to comply with and be bound by these Articles of Incorporation and the Bylaws of the Corporation and any amendments thereto and such rules and regulations as may from time to time be adopted by the Board of Directors.

PROVIDED, however, that no person, firm, corporation or body politic shall become a member unless and until he or it has been accepted for membership by the Board of Directors or the members in the manner provided for in the Bylaws. No person, firm, corporation or body politic may own more than one (1) membership in the Corporation.

A husband and wife may jointly become a member and their application for a joint membership may be accepted in accordance with the foregoing provisions of this Section, provided the husband and wife comply jointly with the foregoing provisions of the above subdivisions (a), (b), and (c).

SECTION 3. Membership in the Corporation shall be terminated by death, cessation of existence, expulsion or withdrawal of the member as provided in the Bylaws of the Corporation. Termination of membership in any manner shall not release the member, or his estate from the debts or liabilities of such member to the Corporation.

SECTION 4. Each member shall be entitled to one (1) vote and no more upon each matter submitted to a vote at a meeting of the members. At all meetings of the members at which a quorum is present, all questions shall be decided by a vote of a majority of the members voting thereon in person or by proxy, except as otherwise provided by law, or these Articles of Incorporation. No proxy shall be valid after sixty (60) days from the date of its execution, and the person so appointed may not vote at any meeting other than the one designated in the proxy or any adjournment or adjournments of such meeting. No person shall vote as proxy for more than three (3) members at any meeting of the members except upon the question of amendment of the Articles of Incorporation to increase the number of counties in which the Corporation may operate or on the question of mortgaging or otherwise encumbering any of the Corporation's property to secure loans made or to be made to the Corporation by the United States of America or any agency or instrumentality thereof, the National Rural Utilities Cooperative Finance Corporation, and any other agency where mortgage arrangements can be accommodated and approved by the Rural Utilities Service, in either of which cases a person may hold an unlimited number of proxies. If a husband and wife hold a joint membership they shall jointly be entitled to one (1) vote and no more upon each matter submitted to a vote at a meeting of the members.

SECTION 5. The private property of the members of the Corporation shall be exempt from execution for the debts of the Corporation and no member or incorporator shall be individually liable or responsible for any debts or liabilities of the Corporation.

SECTION 6. The Bylaws of the Corporation may fix other terms and conditions upon which persons shall be admitted to and retain membership in the Corporation not inconsistent with these Articles of Incorporation or the Act under which the Corporation is organized.

ARTICLE IX

SECTION 1. The Board of Directors shall have power to make and adopt such rules and regulations not inconsistent with these Articles of Incorporation or the Bylaws of the Corporation as it may deem advisable for the management, administration and regulation of the business and affairs of the Corporation.

SECTION 2. Directors of the Corporation shall be members thereof.

ARTICLE X

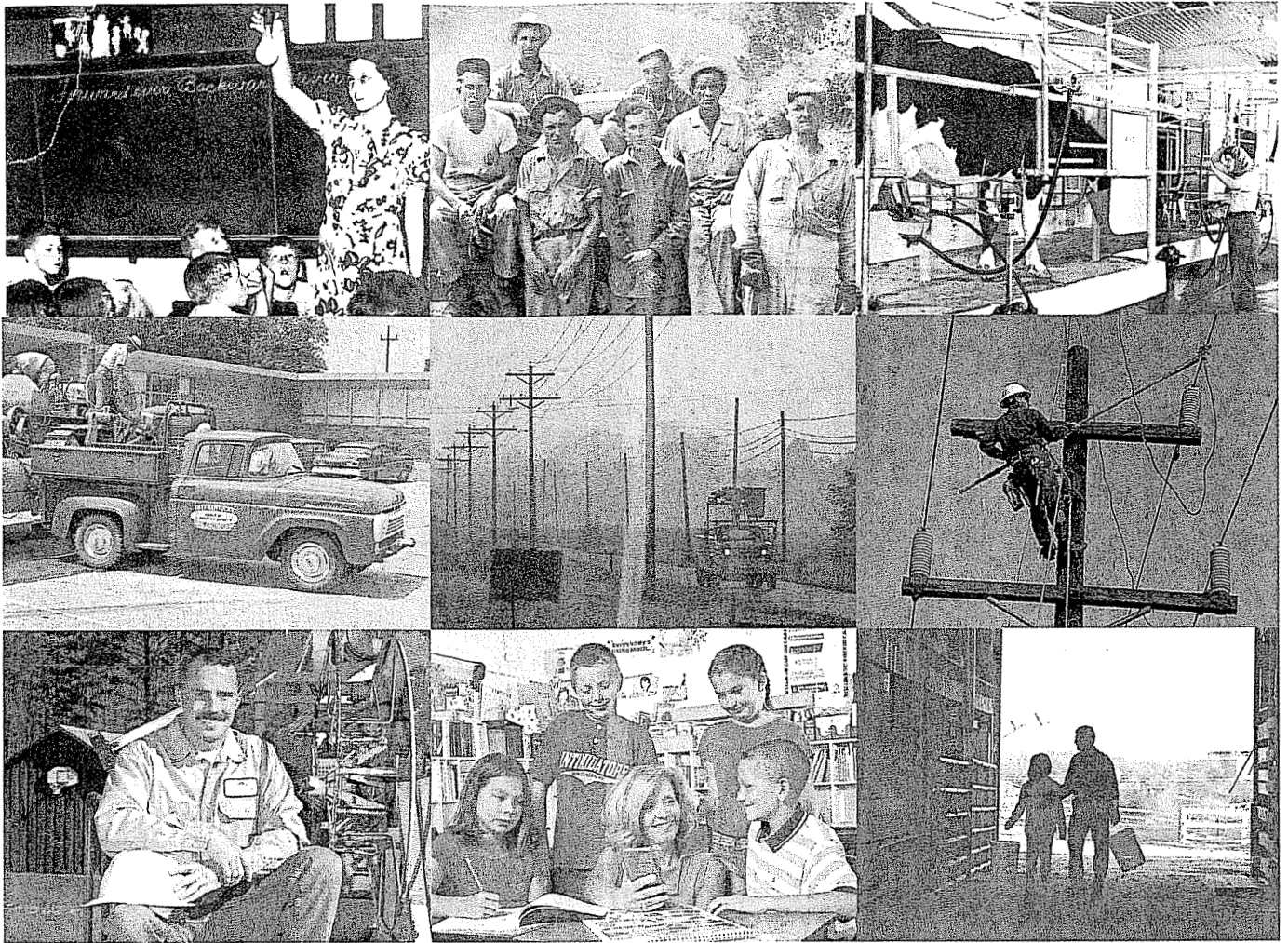
The Corporation may amend, alter, change or repeal any provision contained in these Articles of Incorporation in the manner now or hereafter prescribed by law.

IN WITNESS WHEREOF, We hereunto subscribe our names this 12th day of June, 1937.

(Signed) William H. Rogers
Kearney Adams
P. E. Hughes
Beeler Whitlock
Robinson Cook

STATEMENT OF NONDISCRIMINATION

Inter-County Energy Cooperative Corporation is the recipient of Federal financial assistance from the U.S. Department of Agriculture (USDA). The USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call toll free (866) 632-9992 (voice) or (800) 877-8339 (TDD) or (866) 377-8642 (relay voice users). USDA is an equal opportunity provider and employer.




Providing Power and Empowering Generations

Since 1935, we've been providing the energy that enables co-op members to change their lives, their community, and their state.



INTER COUNTY

 ENERGY COOPERATIVE

A Touchstone Energy Cooperative 

Energy and the Power of Human Connections

**INTER-COUNTY ENERGY
COOPERATIVE CORPORATION**

2009 - 2012


**CONSTRUCTION
WORK PLAN**

**Kentucky 27 Boyle
P.O. Box 87
Danville, Kentucky 40423-0087**

2009 - 2012 CONSTRUCTION WORK PLAN

FOR



A Touchstone Energy Cooperative 

KENTUCKY - 27 - BOYLE
DANVILLE, KENTUCKY

PREPARED BY:

INTER COUNTY ENERGY COOPERATIVE CORPORATION

DANVILLE, KENTUCKY

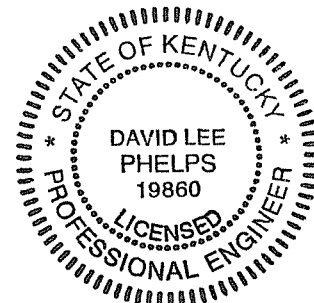
DECEMBER, 2008

I hereby certify that this 2009 - 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.

10/3/08
(Date)

By: David L. Phelps
(Engineer, P.E.)

Registration No. 19860



ICECC CONSTRUCTION WORK PLAN REPORT

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APPENDIX B - System Maps

- A. Map of Proposed System under Projected Loads

PURPOSE OF REPORT

The purpose of this report is to document the construction needed to provide adequate and dependable service to the members of Inter-County Energy Cooperative Corporation (ICECC) for the four-year planning period beginning 1/09 and ending 12/12.

This report provides engineering support, in the form of descriptions, costs and justifications, for a loan application to RUS. Loan funds will finance the construction projects proposed herein.

GENERAL BASIS OF STUDY

The following items established the basis for this four-year construction work plan:

- 2008 Power Requirements Study (PRS)
- 2008 Long Range Plan (LRP)
- 2007 Review Rating Summary - RUS Form 300
- Historical Cost Data – 1/06 through 12/07
- Design Criteria

The EKP 2008 Power Requirements Study projects the cooperative's total system noncoincident peak demand will reach 182 megawatts by the end of this four-year planning period. This is based on the one in ten-year probability that temperatures will fall to a minus 17 degrees. The voltage drop analysis was based on the 182 megawatt load level. All construction items recommended in this work plan are justified under extreme weather projections.

The projected load was applied to the existing system configuration and the system operating characteristics were studied to determine areas of substandard performance based on RUS guidelines and the design criteria presented in Section II of this document. A circuit analysis package from Milsoft Integrated Solutions was used to perform the calculations. Please refer to Section IV of this document for sample calculations provided by the circuit analysis software. The consumer and load data were obtained from the cooperative's billing system. Loads classified as large power were attached to the system using their known kW loading adjusted for an estimated contribution to the system peak kW load.

For each deficiency identified, alternative plans were investigated and economically evaluated, so that the most economical long term solution could be proposed. Please refer to Section IV of this document for a sample economical evaluation.

The cooperative's current Long Range Plan (LRP) was prepared by Patterson & Dewar Engineers and approved by RUS in 2008. Its load projections and recommendations are

adequate for this four-year planning period. All construction proposed herein is consistent with the LRP unless otherwise noted.

The cooperative's 2007 operations and maintenance review (Review Rating Summary; RUS Form 300) was used to determine construction required to replace physically deteriorated equipment and material, upgrade portions of the system to conform with code or safety requirements, and/or improve reliability or quality of service.

New distribution, transmission, and power supply construction requirements were considered simultaneously as a "one system" approach for the orderly and economical development of the total system. All of the proposed construction and recommendations herein, relative to power supply and delivery, were discussed with the cooperative's power supplier, East Kentucky Power Cooperative (EKPC).

A complete list of lines and equipment required to serve approximately 2300 new services is presented in Section III of this document. A similar list of lines and equipment required to upgrade services for existing members is also presented in Section III. The estimated costs associated with these items are based on historical data.

GENERAL OVERVIEW OF CONSTRUCTION

Approximately 129 miles of new primary lines: 223 miles total primary, secondary and services, will be built to serve 2300 new services over the four-year planning period.

Approximately 112 miles of deteriorated conductor will be replaced with new 1/0 AAAC. This is approximately 28 miles per year.

No new distribution substations are planned for the work plan period.

Seventy-one system improvement projects are scheduled for construction over this four-year planning period. These construction work plan projects consist primarily of voltage conversion, multiphasing, and 40 conductor replacement projects. Section III provides detailed information pertaining to each individual work plan project.

AMR will be implemented within this work plan throughout the cooperatives system to improve system efficiencies, consumer relations, and reduction of fuel consumption from present contractor based meter reading company.

RESULTS OF PROPOSED CONSTRUCTION

Upon completion of this construction work plan, approximately 26,852 members, 94.8% residential using 1262 kWh per consumer per month, will be provided with adequate and dependable electric service from Inter County Energy Cooperative Corporation.

The AMR will result in more accurate meter reads, better customer relations because of better reading data, and start a strong foundation towards implementing a better outage management system with remote disconnect capability.

SERVICE AREA AND POWER SUPPLY

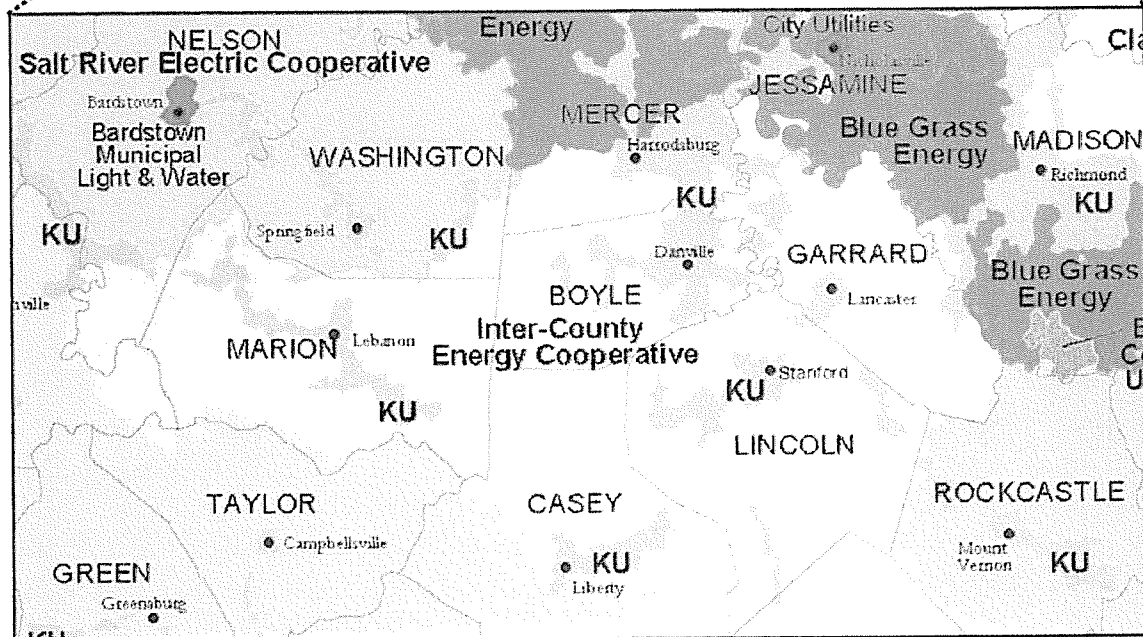
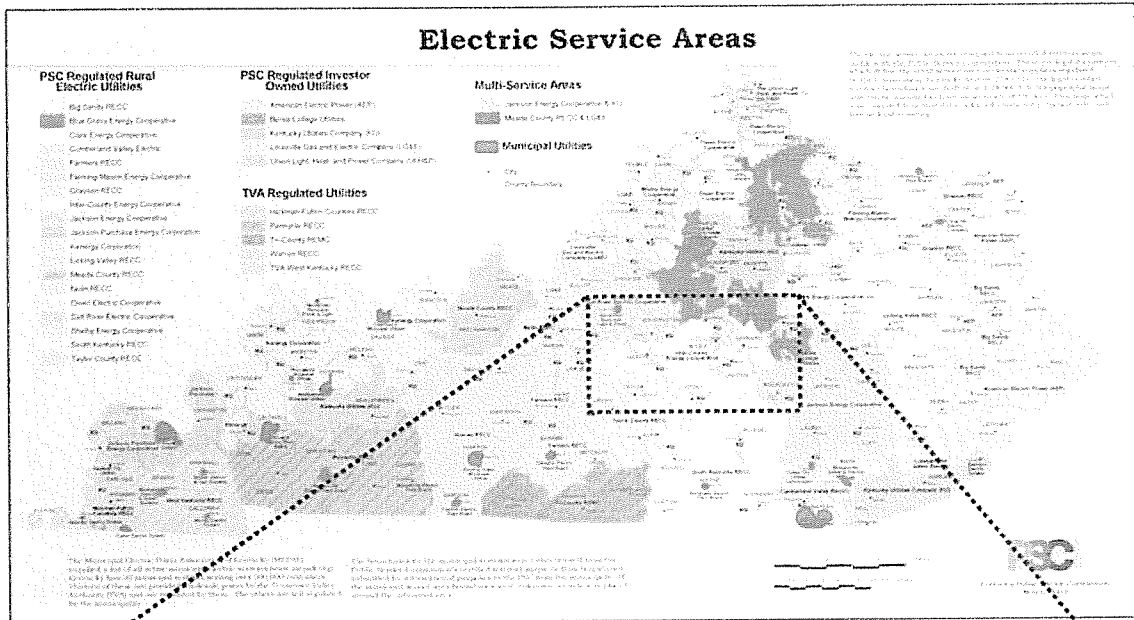
Inter County Energy Cooperative Corporation, whose headquarters are located in Danville, Kentucky, provides retail electric service to rural areas of the following central Kentucky counties: Boyle, Lincoln, Casey, Marion, Mercer and Garrard. The Cooperative also serves minor parts of the adjoining counties of Washington, Taylor, Madison, Rockcastle, Larue and Nelson. Kentucky Utilities Company provides electric service to all of the urban areas and small towns in the area.

The economy of the area has been based in tobacco, dairy and beef cattle farming. Hardwood timber, fruits and vegetables supplemented the agricultural base. In recent years changes have taken place in the area. Employment is increasing in the urban centers. Several rural residents are commuters. Many small farms are part time operations or have been purchased by adjoining land owners to form larger farms.

There are 42 primary distribution circuits totaling 3,642 miles of line served from fourteen distribution substations. Thirty-six of the primary distribution circuits are operating at 14,400/24,941 volts. The remaining six circuits are operating at 7,200/12,470 volts. Existing conductor sizes range from #6 copper to 397 ACSR. Most new construction is being built overhead using 1/0 AAAC conductor.

East Kentucky Power Cooperative (EKPC) supplies all power to Inter-County Energy Cooperative Corporation, plus 15 other distribution cooperatives, by virtue of a standard "all requirements" contract. EKPC owns and maintains the fourteen distribution substations being utilized by Inter County Energy Cooperative Corporation. Eleven of the fourteen distribution substations are 69/25 kV. One of the fourteen distribution substations is 161/25 kV. The remaining two substations are 69/12.5 kV. EKPC is a RUS financed G&T cooperative with offices located in Winchester, Kentucky.

KENTUCKY MAP WITH INTER-COUNTY ENERGY'S SERVICE AREA NOTED



INTER COUNTY ENERGY
2009-2012 CONSTRUCTION WORK PLAN

SUMMARY

CODE	DESCRIPTION	MILES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
100	NEW DISTRIBUTION LINES	182	1,528,000	1,906,800	1,983,000	2,062,200	7,480,000
301	Hwy 527 7.2 KV to 14.4 KV Voltage Conversion	3.24		8100			\$ 8,100
302	Gravel Pit 7.2 KV to 14.4 KV Voltage Conversion	5.07			12675		\$ 12,675
303	Hwy 1183 7.2 KV to 14.4 KV Voltage Conversion	6.2		15500			\$ 15,500
304	Hwy 49 to Hwy 527 7.2 KV to 14.4 KV Voltage Conversion	1.8	10800				\$ 10,800
305	Loretto Rd 1 Convert 1ph to 3ph, 1/0 AAAC	3.42	139365				\$ 139,365
306	Loretto Rd 2 7.2 KV to 14.4 KV Voltage Conversion	14.4		86400			\$ 86,400
307	Loretto Rd 3 Conductor Replacement w 3ph, 1/0 AAAC	2.3			81190		\$ 81,190
308	Hwy 68 Convert 1ph to 3ph, 1/0 AAAC	0.9			36675		\$ 36,675
309	Barbers Mill Rd Convert 1ph to 3ph, 1/0 AAAC	1.1	44825				\$ 44,825
310	Hwy 412 7.2 KV to 14.4 KV Voltage Conversion	6.1	28200				\$ 28,200
311	Webster Rd 7.2 KV to 14.4 KV Voltage Conversion	6.77		16925			\$ 16,925
312	Hwy 243 7.2 KV to 14.4 KV Voltage Conversion	10.9		27250			\$ 27,250
313	Chelf Ridge Rd Conductor Replacement w 1ph, 1/0AAAC	2.65		43990			\$ 43,990
314	Woodrum Ridge Rd 7.2 KV to 14.4 KV Voltage Conversion	10.42	26050				\$ 26,050
315	Powell Rd Conductor Replacement w 1ph, 1/0AAAC	1.7				28220	\$ 28,220
316	Lower Brush Creek 7.2 KV to 14.4 KV Voltage Conversion	14.45	36125				\$ 36,125
317	Mackville Rd Convert 2ph to 3ph, 1/0 AAAC	1.1		40330			\$ 40,330
318	Oakland Lane Convert 1ph to 2ph, 1/0 AAAC	0.9				35280	\$ 35,280
319	Sparrow Road Conductor Replacement w 3ph - 397ACSR	1.92	114432				\$ 114,432
320	Noscoe Rd 7.2 KV to 14.4 KV Voltage Conversion	6	15000				\$ 15,000
321	Black Pike Rd 7.2 KV to 14.4 KV Voltage Conversion	9		22500			\$ 22,500
322	Hwy 127 Convert 1ph to 3ph, 1/0 AAAC	1.6		65200			\$ 65,200
323	Christman Spur Rd Convert 1ph to 2ph, 1/0 AAAC	0.5			19500		\$ 19,500
324	Ballard Rd Convert 1ph to 2ph, 1/0 AAAC	0.7				27440	\$ 27,440
325	Settlement Dr Convert 1ph to 2ph, 1/0 AAAC	0.4				15680	\$ 15,680
326	Hwy 590 7.2 KV to 14.4 KV Voltage Conversion	6.65		16625			\$ 16,625
327	Cartersville Rd Convert 1ph to 3ph, 1/0 AAAC	2		81500			\$ 81,500

328	Hwy 1770 7.2 KV to 14 4 KV Voltage Conversion	11.8		29500		\$	29,500
329	Kirksville Rd Convert 1ph to 2ph, 1/0 AAAC	1.67			65464	\$	65,464
330	Gillespie Pike 7.2 KV to 14 4 KV Voltage Conversion	5.2	13000			\$	13,000
331	Fall Lick Rd Convert 1ph to 2ph, 1/0 AAAC	1.3			50960	\$	50,960
332	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.9			48140	\$	48,140
333	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.9	48140			\$	48,140
334	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.9			31540	\$	31,540
335	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.7			44820	\$	44,820
336	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	0.8				13280 \$	13,280
337	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.5			41500	\$	41,500
338	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.1				18260 \$	18,260
339	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2			33200	\$	33,200
340	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.5				41500 \$	41,500
341	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.5			24900	\$	24,900
342	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.5			24900	\$	24,900
343	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	3.6	59760			\$	59,760
344	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	0.8				13280 \$	13,280
345	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	0.6				9960 \$	9,960
346	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.1				34860 \$	34,860
347	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	3.14				52124 \$	52,124
348	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	4.9			81340	\$	81,340
349	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.26				37500 \$	37,500
350	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.6				43160 \$	43,160
351	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2				33200 \$	33,200
352	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2				33200 \$	33,200
353	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.6				26560 \$	26,560
354	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	3.65		60590		\$	60,590
355	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	4.13		68560		\$	68,560
356	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.1			34860	\$	34,860
357	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.5			24900	\$	24,900

358	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.4			39840		\$	39,840			
359	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.3				21580	\$	21,580			
360	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.9				48140	\$	48,140			
361	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	3.7	61420				\$	61,420			
362	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.43				40340	\$	40,340			
363	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	6.5	107900				\$	107,900			
364	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	3.5		58100			\$	58,100			
365	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	1.6	26560				\$	26,560			
366	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	4.6				76360	\$	76,360			
367	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	2.5				41500	\$	41,500			
368	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	5		83000			\$	83,000			
369	Re-Conductor Conductor Replacement w 3ph 1/0AAAC	1		35300			\$	35,300			
370	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	4.4			73040		\$	73,040			
371	* Re-Conductor Conductor Replacement w 1ph 1/0AAAC	4.4				73040	\$	73,040			
300	SYSTEM IMPROVEMENT	247.67	731577	759370	769544	764464	\$	3,024,955			
601	TRANSFORMERS & METERS & AMR	\$	1,097,390	\$	3,024,074	\$	2,958,223	\$	1,196,874	\$	8,276,561
602	SERVICE UPGRADES	\$	822,348	\$	855,102	\$	889,128	\$	924,744	\$	3,491,322
603	SECTIONALIZING EQUIPMENT	\$	60,213	\$	60,213	\$	60,213	\$	60,213	\$	240,850
604	VOLTAGE REGULATORS	\$	-	\$	-	\$	-	\$	-	\$	-
605	CAPACITORS	\$	-	\$	-	\$	-	\$	-	\$	-
606	REPLACEMENTS - POLES	\$	280,000	\$	291,000	\$	303,000	\$	315,000	\$	1,189,000
608	CONDUCTOR REPLACEMENTS	\$	78,180	\$	81,310	\$	84,560	\$	87,945	\$	331,995
612	DISTRIBUTION AUTOTRANSFORMERS	\$	-	\$	-	\$	-	\$	-	\$	-
600	DISTRIBUTION EQUIPMENT	\$	2,338,131	\$	4,311,699	\$	4,295,124	\$	2,584,776	\$	13,529,728
701	SECURITY LIGHTS	\$	162,610	\$	169,050	\$	175,720	\$	182,850	\$	690,230
705	AUTOMATED METER READING EQUIP			\$	796,500			\$		\$	796,500
700	OTHER DISTRIBUTION ITEMS	\$	162,610	\$	965,550	\$	175,720	\$	182,850	\$	1,486,730

* Indicates carry over projects

GRAND TOTAL:	\$ 25,521,413
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SUBSTATION TRANSFORMER AND CKT LOAD DATA

SUBSTATION	TRANSFORMER*			Existing system 2008	Existing system 2012/13	Proposed system 2012/13	Percent Existing Capacity 2012/13	Percent Proposed Capacity 2012/13	NOTE
	#	KVA	CKT.						
1 Lancaster (14.4/24.9 KV)	1	11200	sub.	8,500	9,300	9,300	51%	51%	
			1	4659	5069	5069			
			2	3344	3676	3676			
			3	71	80	80			
			4	426	475	475			
2 Ballard (14.4/24.9 KV)	1	11200	sub.	12,700	13,900	13,900	77%	77%	
			1	4609	5036	5036			
			2	4508	4942	4942			
			3	3583	3922	3922			
3 Highland (14.4/24.9 KV)	1	11,200	sub.	15,000	16,300	16,300	90%	90%	
			1	5274	5679	5679			
			2	2935	3208	3208			
			3	6731	7347	7347			
			4	60	66	66			
4 Shelby City (14.4/24.9 KV)	1	15,000	sub.	19,700	21,300	21,300	69%	69%	
			1	4011	4358	4358			
			2	1586	1688	1688			
			3	7042	7635	7635			
			4	7061	7619	7619			
5 Peyton's Store (14.4/24.9 KV)	1	11,200	sub.	11,400	12,200	12,200	67%	67%	
			1	4710	5079	5079			
			2	1031	1101	1101			
			3	5659	6020	6020			
6 Perryville (7.2/12.5 KV)	1	11,200	sub.	13,400	14,100	14,100	78%	78%	
			1	2301	2418	2418			
			2	4698	4948	4948			
			3	4443	4676	4676			
			4	1958	2058	2058			
7 Lebanon (14.4/24.9 KV)	1	11,200	sub.	12,100	13,100	13,100	72%	72%	
			1	8910	9580	9580			
			2	3190	3520	3520			
8 Loretto (14.4/24.9 KV)	1	11,200	sub.	4,800	5,200	5,200	29%	29%	
			1	3981	4308	4308			
2				819	892	892			
9 Sulphur Creek (14.4/24.9 KV)	1	11,200	sub.	9,100	9,700	9,700	53%	53%	
			1	6562	7003	7003			
			2	1300	1374	1374			
			3	1238	1323	1323			
10 HT Adams (7.2/12.5 KV)	1	11,200	sub.	7,400	7,900	7,900	44%	44%	
			1	4034	4295	4295			
			2	3366	3605	3605			
11 T Gooch (14.4/24.9 KV)	1	15,000	sub.	29,300	32,100	32,100	103%	103%	2
			1	7550	8347	8347			
			2	5082	5592	5592			
			3	4327	4693	4693			
			4	6107	6601	6601			
5	6234	6867	6867						
12 Marion County Ind. Park (14.4/24.9 KV)	1	12,000	sub.	12,700	13,500	13,500	54%	54%	
			1	6,527	6502	6502			
			2	1,042	1038	1038			
			3	5131	5960	5960			
13 Garrard (14.4/24.9 KV)	1	11,200	sub.	8700	9500	9500	52%	52%	1
			1	5399	5881	5881			
			2	3301	3619	3619			
14 Toddville (14.4/24.9 KV)	1	11,200	sub.	5000	5500	5500	30%	30%	1
			1	2835	3135	3135			
			2	2165	2365	2365			
Total System:			42	169,800	183,600	183,600			

See the following page for an explanation of each note.

SUBSTATION TRANSFORMER AND CKT LOAD DATA

<u>Note</u>	<u>Explanation</u>
1)	Garrard and Toddville came on-line in 2008 relieving Ballard of 5000 KW and Lancaster of 8700 KW.
2)	Fans will be installed on the Gooch Substation and load will be transferred to a new substation in 2013 as outlined in the long range plan.

SUBSTATION TRANSFORMER AND CKT LOAD DATA

Note	Explanation
1)	Garrard and Toddville came on-line in 2008 and relieving Ballard of 5000 KW and Lancaster of 8700 KW.
2)	Fans are installed on the Gooch Substation, and load will be transferred to a new substation in 2013 as outlined in the long range plan.

**INTER COUNTY ENERGY
2009-2012 CONSTRUCTION WORK PLAN**

DESIGN CRITERIA

Each of the following design criteria items were reviewed and concurred by Mike Norman, General Field Representative, on Aug. 13, 2008.

Construction proposed herein is required to meet the following minimum standards for voltage, thermal load, safety and system reliability. Conditions could require corrective action to exceed minimum standards.

1. The minimum voltage on primary distribution lines is 118 volts (120 volt base, 126 volts at source after re-regulation).
2. Primary conductors not to be loaded over 75% of their thermal rating. Loading limits will be determined by guidelines given in RUS Bulletin 160-2 "MECHANICAL DESIGN MANUAL FOR OVERHEAD DISTRIBUTION LINES".
3. The following equipment will have maximum loading not to exceed the following nameplate percentages:
 - Power Transformers 130% Winter; 100% Summer
 - Regulators 130% Winter; 100% Summer
 - Voltage Conversion Transformers 130% Winter; 100% Summer
 - Reclosers 70% Winter; 70% Summer
 - Line Fuses 70% Winter; 70% Summer
4. Conductors (and associated poles and hardware as required) will be rebuilt or relocated if they are to be found to be unsafe or fail to meet applicable NESC requirements, current edition.
5. Minimum size of primary conductor to be installed will be 1/0 for both overhead and underground. Standard new overhead conductor wire sizes are 1/0, 4/0, and 397 AAAC or ACSR.
6. Conductors (and associated poles and hardware as required) will be considered for replacement on a systematic basis.
7. Poles and/or crossarms to be replaced if found to be physically deteriorated by visual inspection and/or tests.

8. The standard distribution primary pole that is installed will be a 40' foot class 5.
9. All new distribution lines to be designed and built according to RUS standard construction specifications and guidelines.
10. New lines and line conversions will be built according to the standard primary voltage levels as recommended in the Long Range Plan.
11. Primary conductor sizes are determined on a case by case basis using a Present Worth Cost Analysis computer program with presently known constants and variables. The final proposed conductor may be modified to conform with Inter County Energy's standard sizes and recommendations of the Long Range Plan.
12. Conversions to multi-phase will be considered to correct voltage drop and phase balance problems. Single phase and vee phase lines operating at 7.2/12.47 kV with loads exceeding 250 kW per phase will be considered for multiphasing. Single phase and vee phase lines operating at 14.4/24.94 kV with loads exceeding 430 kW per phase will be considered for multi-phasing.
13. Voltage conversions from 7.2/12.47 kV to 14.4/24.94 kV will be considered to relieve thermally loaded conductors, reduce voltage drop, and relieve single and vee phase lines exceeding 250 kW per phase. Major factors used to determine if voltage conversions are appropriate rather than multi-phase and/or replacement are:
 - Condition of conductor.
 - Location of project relative to existing 14.4/24.94 kV.
 - Ability to reuse retired 7.2/12.47 kV transformers.
 - Impact of planned outages during conversions to critical loads such as hospitals, water treatment facilities, etc..
14. All new primary construction to be overhead except subdivisions and where underground is required to comply with governmental or environmental regulations, local restrictions, or favorable economics.
15. Capacitors are to be added to maintain substation power factors at peak loading between 95% and unity.

DISTRIBUTION CONSTRUCTION AND EQUIPMENT COST

<u>Type of Construction</u>	<u>Est. Cost Per Mile</u>
Conductor Replacement with 1-ph 1/0 AAAC	\$16,600
Conductor Replacement with 3-ph 1/0 AAAC	\$35,300
Conductor Replacement with 3-ph 4/0 ACSR	\$44,100
Conductor Replacement with 3-ph 397 ACSR	\$59,600
Voltage Conversion 1-ph	\$2,500
Voltage Conversion 2-ph	\$4,500
Voltage Conversion 3-ph	\$6,000
Voltage Conversion 3-ph partially insulated	\$3,000
Line Conversion 1-ph to 2-ph w/ 1/0 AAAC	\$39,200
Line Conversion 1-ph to 3-ph w/ 1/0 AAAC	\$40,750
Line Conversion 1-ph to 3-ph w/ 4/0 ACSR	\$48,200
Line Conversion 1-ph to 3-ph w/ 397 ACSR	\$52,600
Line Conversion 2-ph to 3-ph w/ 1/0 AAAC	\$29,900
Line Conversion 2-ph to 3-ph w/ 4/0 AAAC	\$35,900
New 1-ph with 1/0 AAAC	\$29,300
New 3-ph with 1/0 AAAC	\$46,800
New 3-ph with 4/0 ACSR	\$56,200
New 3-ph with 397 ACSR	\$69,700
New 3-ph with 795 ACSR	\$84,300

<u>Type of Equipment</u>	<u>Cost per Item</u>
14.4/7.2 kv, 167 KVA Step	\$6,000
14.4/7.2 kv, 333 KVA Step	\$9,000
14.4/7.2 kv, 1000 KVA Step	\$13,000
7.2 kv, 50 Amp Regulator	\$7,000
7.2 kv, 219 Amp Regulator	\$9,000
14.4 kv, 100 Amp Regulator	\$10,500
Type "E" OCR	\$4,100
Type "L" OCR	\$3,900
Type "H" OCR	\$3,600

STATUS OF PREVIOUS (2005-2008) CWP PROJECTS

<u>CFR CODE</u>	<u>DESCRIPTION</u>	<u>Estimated Cost</u>		<u>STATUS</u>
		<u>ORIGINAL</u>	<u>ACTUAL</u>	
301	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 63,000.00	\$ 14,318.09	Complete
302	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 9,450.00	\$ 16,754.33	Complete
303	Convert 3ph 1/0 AAAC to 4/0 ACSR and 3ph #4 ACSR to 1/0 AAAC	\$ 44,000.00	\$ 64,596.61	Complete
304	Convert 3ph #4 ACSR to 1/0 AAAC and new 3ph 4/0 UG primary	\$ 28,780.00	\$ 39,223.27	Complete
305	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 67,200.00	\$ 72,249.89	Complete
306	7.2 KV to 14.4 KV Voltage Conversion	\$ 5,000.00	\$ 3,282.55	Complete
307	7.2 KV to 14.4 KV Voltage Conversion	\$ 22,000.00	\$ 24,936.72	Complete
308	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 42,000.00	\$ 12,402.67	Complete
309	Convert 1ph 1/0 AAAC to 3 ph 1/0 AAAC	\$ 89,650.00	\$ 58,287.73	Complete
310	7.2 KV to 14.4 KV Voltage Conversion	\$ 3,500.00	\$ 2,528.66	Complete
311	7.2 KV to 14.4 KV Voltage Conversion	\$ 12,500.00	\$ 5,857.56	Complete
312	7.2 KV to 14.4 KV Voltage Conversion	\$ 33,800.00	\$ 14,561.89	Complete
313	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 160,500.00		Carryover
314	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 96,000.00		Carryover
315	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 129,000.00	\$ 120,638.25	Complete
316	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 192,000.00		Carryover
317	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 136,500.00		Carryover
318	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 165,000.00		Carryover
319	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 145,500.00	\$ 160,597.77	Complete
320	7.2 KV to 14.4 KV Voltage Conversion	\$ 16,000.00	\$ 6,174.97	Complete
321	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 38,500.00	\$ 42,001.07	Complete
322	Convert 1 ph, #4 ACSR to 3 ph, 1/0 AAAC	\$ 65,200.00	\$ 53,338.32	Complete
323	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 57,050.00	\$ 21,193.87	Complete
324	Convert 1 ph, #4 ACSR to 2 ph 1/0 AAAC	\$ 84,000.00	\$ 51,779.19	Complete
325	7.2 KV to 14.4 KV Voltage Conversion	\$ 12,250.00	\$ 3,307.07	Complete
326	7.2 KV to 14.4 KV Voltage Conversion	\$ 67,400.00	\$ 25,934.39	Complete
327	7.2 KV to 14.4 KV Voltage Conversion	\$ 21,150.00	\$ 9,751.45	Complete
328	New 3 ph, 4/0 ACSR	\$ 73,520.00	\$ 89,969.39	Complete
329	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 169,500.00	\$ 192,439.95	Complete
330	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 132,000.00		Carryover
331	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 82,500.00		Carryover
332	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 58,500.00		Complete
333	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 87,450.00	\$ 43,969.67	Complete
334	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 56,250.00		Complete

335	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 120,900.00		Carryover
336	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 33,000.00	\$ 33,991.47	Complete
337	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 82,500.00		Carryover
338	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 114,000.00		Complete
339	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 175,500.00	\$ 216,411.26	Complete
340	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 132,450.00		Carryover
341	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 66,000.00		Carryover
342	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 85,500.00		Carryover
343	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 138,750.00		Carryover
344	Reconductor 1 ph, #4 ACSR with 1 ph, 1/0 AAAC	\$ 108,750.00		Carryover
345	New dbl ckt 500MCM UG pri & dble ckt 397 ACSR	\$ 326,970.00	\$ 99,452.66	Complete
		\$ 3,850,970.00	\$ 1,499,950.72	

ANALYSIS OF 2008 LONG-RANGE PLAN

Inter-County Energy Cooperative's 2008 Long-Range Plan (LRP) was prepared by Patterson & Dewar Engineers of Decatur, Georgia in January of 2008. It was approved by RUS later that year.

The load projections were based on the various rates of change of growth in the number of consumers estimated for all the counties served by the cooperative. The system peak MW demand levels in this study were 135, 142, 157, 173, and 270. These levels were assigned to the respective years of 2006, 2009, 2013, 2017, and 2030.

The 2008 LRP load levels are less than the corresponding load projections presented in the East Ky Power 2008 Power Requirement Study (PRS). Therefore, certain construction projects proposed in this work plan are needed sooner than anticipated by the LRP.

The LRP recommends that the distribution system continue to be converted from 7.2/12.5 kV to 14.4/24.9 kV, except for two circuits out of Perryville substation and the HT Adams substation.. As the lines are being converted, the LRP also recommends that deteriorated poles, crossarms and conductor be replaced in addition to all voltage sensitive equipment.

The LRP does not address deteriorated conductor to be replaced per year. ICECC's records indicate that approximately 37% of existing lines are 8A copper, 6A copper and 4ACSR. Lines with these conductors are generally the older lines and are the source of problems in maintenance and service reliability.

ANALYSIS OF 2007 O&M SURVEY

In 2007, an Operation and Maintenance Survey (O & M Survey) of ICECC distribution system was conducted. The cooperative's records concerning line and pole inspections, voltage and current tests, special equipment and service interruptions formed the general basis for the system analysis and rating. The completed O & M Survey was reviewed by Mike Norman, RUS General Field Representative, on December 11, 2007.

Transmission lines and distribution substations are owned and maintained by East Kentucky Power Cooperative (EKPC) and have been excluded from the rating process.

The overhead and underground distribution facilities were given a satisfactory rating. All operations and maintenance programs, and engineering programs were found to be in satisfactory condition.

The service interruption records received a satisfactory rating. Those records indicated that each member experienced, on the average, 3.01 hours of outage time in 2002, 4.09 hours in 2003, 3.77 hours in 2004, 2.27 hours in 2005, 4.03 hours in 2006, and 3.15 hours in 2007.

The cooperative employs one contractor, consisting of four cutting crews and two spraying crew to clear its overhead distribution line rights-of-way. Approximately 800 miles of distribution lines are cleared each year. The right-of-way-clearing program is on a five-year cycle.

Contract labor was utilized in the last construction work plan to assist ICECC's in-house construction crews. ICECC will employ contractors to build the proposed projects in this 4-year construction work plan.

HISTORICAL KWH, KW, & CONSUMER DATA

YEAR	ENERGY PURCHASE	ENERGY SOLD		ENERGY LOSS		NONCOIN. PEAK BILLING DEMAND		% ANN. LOAD FACTOR	CONSUMERS	
	(MWH)	(MWH)	% INC	(MWH)	%	(MW)	% INC		AVG.	% INC
1998	333,268	314,354	4.6	18,609	5.6	95.7	23.2	39.8	21,061	4.0
1999	354,039	331,577	5.5	22,150	6.3	96.9	1.3	41.7	21,393	1.6
2000	385,379	360,459	8.7	24,565	6.4	110.4	13.9	39.8	22,139	3.5
2001	384,224	368,720	2.3	15,164	3.9	102.4	-7.2	42.8	22,660	2.4
2002	419,378	400,040	8.5	18,992	4.5	124.1	21.2	38.6	23,181	2.3
2003	425,610	404,305	1.1	20,981	4.9	127.7	2.9	38.0	23,623	1.9
2004	435,479	411,476	1.8	23,700	5.4	125.8	-1.5	39.5	24,059	1.8
2005	464,527	442,642	7.6	21,407	4.6	120.9	-3.9	43.9	24,501	1.8
2006	455,869	435,543	-1.6	19,709	4.3	140	15.8	37.2	24,869	1.5
2007	480,460	453,627	4.2	26,162	5.4	139.8	-0.1	39.2	25,185	1.3

10-YEAR AVERAGE

5.1%

40.1

10-YR AVG. COMPOUNDED

4.2%

4.3%

2.0%

PROJECTED KWH, KW & CONSUMER DATA

YEAR	ENERGY PURCHASE	ENERGY SOLD		ENERGY LOSS		NONCOIN. PEAK BILLING DEMAND		% ANN. LOAD FACTOR	CONSUMERS	
	(MWH)	(MWH)	% INC	(MWH)	%	(MW)	% INC		AVG.	% INC
2009										
Increase	N/A	N/A		N/A	5.4%	N/A	N/A	39.6%	N/A	N/A
Total	514,665	485,969		27,792		148.5			25,832	
2010										
Increase	9,990	9,446	1.9%		5.4%	2.2	1.5%	39.7%	320	1.2
Total	524,655	495,415		28,331		150.7			26,152	
2011										
Increase	8,229	7,781	1.6%		5.4%	2.5	1.7%	39.7%	332	1.3
Total	532,884	503,196		28,776		153.2			26,484	
2012										
Increase	10,488	9,917	2.0%		5.4%	2.8	1.8%	39.8%	368	1.4
Total	543,372	513,113		29,342		156			26,852	

Note: The information provided above was taken from ICE 2008 Power Requirements Study and Form 7 annual reports.

SUBSTATION HISTORICAL PEAK KW DEMANDS

	SUBSTATION (VOLTAGE - KV)	TRANSFORMER RATINGS *		NONCOINCIDENT PEAK DEMAND				MAX LOAD % of RATING	PF @ PEAK LOAD
		WINTER KVA	SUMMER KVA	Winter 2007-08		SUMMER 2007			
				KW	MONTH	KW	MONTH		
1	Lancaster (69/24.94)	18,140	13,620	13,974	Jan	8,726	Aug	77%	0.99
2	Ballard (69/24.94)	18,140	13,620	14,089	Jan	8,922	Aug	78%	0.99
3	Highland (69/24.94)	18,140	13,620	12,292	Jan	8,029	Aug	68%	0.99
4	Shelby City (69/24.94)	31,050	24,000	16,157	Jan	14,296	Aug	52%	0.99
5	Peyton's Store (69/24.94)	18,140	13,620	9,719	Jan	6,190	Aug	54%	0.99
6	Perryville (69/12.47)	18,140	13,620	11,543	Jan	7,841	Aug	64%	0.99
7	Lebanon (69/24.94)	18,140	13,620	9,959	Jan	7,621	Aug	55%	0.99
8	Loretto (69/12.47)	18,140	13,620	3,980	Jan	3,433	Aug	22%	0.99
9	Sulphur Creek (69/24.94)	18,140	13,620	7,713	Jan	6,077	Aug	45%	0.99
10	H T Adams (69/12.47)	18,140	13,620	6,169	Jan	5,620	Aug	34%	0.99
11	T Gooch (69/24.94)	31050	24000	23380	Jan	14976	Aug	75%	0.99
12	Marion Industrial (161/24.94)	24840	19200	10812	Jan	9700	Aug	44%	0.99
13	Garrard** (69/24.94)								
14	Toddville** (69/24.94)								

Notes:

* Absolute maximum transformer ratings provided by East Kentucky Power.

** Substations scheduled for installation at the end of 2008. Therefore information is not yet available.

COLD WEATHER CURRENT MEASUREMENTS

Approx 6°F
25-Jan-08

Substation	Circuit	Winter 2007-2008			
		Phase A	Phase B	Phase C	% Unbalanced(1)
Lancaster (14.4/24.9)	1	98	122	80	122%
	2	83	58	96	73%
	3	38	100	63	149%
	4	92	105	49	60%
Ballard (14.4/24.9)	1	176	255	232	80%
	2	43	91	57	143%
	3	31	40	45	80%
	4	-	-	-	-
Highland (14.4/24.9)	1	-	-	-	-
	2	152	56	86	155%
	3	68	33	46	139%
	4	102	130	153	79%
Shelby City (14.4/24.9)	1	-	-	-	-
	2	6	15	44	203%
	3	188	88	172	59%
	4	121	148	95	122%
Peyton's Store (14.4/24.9)	1	99	64	86	77%
	2	0	42	23	129%
	3	104	127	21	25%
	4	-	-	-	-
Perryville (7.2/12.47)	1	131	179	138	120%
	2	38	69	90	58%
	3	144	145	177	114%
	4	93	92	125	121%
Lebanon (14.4/24.9)	1	-	-	-	-
	2	126	183	133	124%
	3	-	-	-	-
	4	33	107	33	186%
Loretto (7.2/12.47)	1	-	-	-	-
	2	71	65	74	93%
	3	-	-	-	-
	4	14	5	25	170%
Sulphur Creek (14.4/24.9)	1	84	81	193	162%
	2	27	32	12	51%
	3	-	-	-	-
	4	0	10	67	174%
HT Adams (7.2/12.47)	1	-	-	-	-
	2	113	134	152	85%
	3	134	113	121	109%
	4	-	-	-	-
T Gooch (14.4/24.9)	1	149	122	94	77%
	2	73	98	62	126%
	3	74	79	131	138%
	4	98	101	119	112%
	5	-	-	-	-
Marion Industrial (14.4/24.9)	1	119	121	120	101%
	2	34	37	34	106%
	3	82	100	95	89%
	4	-	-	-	-

Notes:

1) Percent Unbalanced is the percent difference between the current of the maximum phase and the average current of all three phases.

SUMMARY OF SERVICE INTERRUPTIONS

AVG. HOURS PER CONSUMER (HRS/YR)

YEAR	POWER SUPPLIER	EXTREME STORM	PREARRANGED	OTHER	TOTAL
2003	0.08	1.69	0.01	2.31	4.09
2004	0.06	0.00	0.02	3.69	3.77
2005	0.31	0.65	0.06	1.25	2.27
2006	0.34	1.32	0.08	2.29	4.03
2007	0.93	0.00	0.06	2.16	3.15

Average 0.34 0.73 0.05 2.34 3.46

OUTAGE REPORT
DECEMBER
2007

REPORTED	ARRIVED	COMPLETED	TIME	CUST #	ACCOUNT	OUTAGE	SERVICEMAN	CON	HR	MIN.	CON-HR	CAUSE OF OUTAGE
12/1/07 8:05 AM	12/1/07 8:35 AM	12/1/07 9:00 AM	0:55:00	66316-1	11892004		Blandford	3	0.92	55	2.75	Refused cutout
12/1/07 11:30 PM	12/2/07 12:30 AM	12/2/07 2:15 AM	2:45:00	20799-3	22632003		Adams	1	2.75	165	2.75	Changed out xfmer
12/2/07 11:29 AM	12/2/07 12:35 PM	12/2/07 1:10 PM	1:41:00	71117-6	22519002		Land	8	1.66	101	13.47	Refused cutout
12/3/07 5:45 PM	12/3/07 6:15 PM	12/3/07 6:30 PM	0:45:00	12670-6	21909014		Adams	8	0.75	45	6.00	Refused cutout
12/4/07 2:50 AM	12/4/07 4:30 AM	12/4/07 5:30 AM	2:40:00	746-8	11866004		Adams	338	2.67	160	901.33	Line Up reenergized OCR 69
12/4/07 7:00 AM	12/4/07 7:20 AM	12/4/07 8:40 AM	1:40:00	65789-0	22532021		Adams	3	1.67	100	5.00	Refused cutout
12/4/07 11:03 AM	12/4/07 11:03 AM	12/4/07 1:55 PM	2:52:00	898-21	21422111		Gribbons	2	2.87	172	5.73	Replaced Pole
12/5/07 1:50 PM	12/5/07 2:20 PM	12/5/07 3:10 PM	1:20:00	74308-8	12203021		Wheatley	25	1.33	80	33.33	Re sag lines due to wind
12/5/07 7:20 PM	12/5/07 7:45 PM	12/5/07 8:40 PM	1:20:00	1489-4	12213009		Wheatley	2	1.33	80	2.67	Changed out xfmer
12/6/07 3:00 PM	12/6/07 3:00 PM	12/6/07 3:10 PM	0:10:00	35074-4	12259041		Wheatley	9	0.17	10	1.50	Birds on Xfmer
12/7/07 2:10 PM	12/7/07 2:25 PM	12/7/07 2:45 PM	0:35:00	71117-6	22519002		Warren	10	0.58	35	5.83	Refused cutout
12/8/07 7:20 PM	12/8/07 7:35 PM	12/8/07 7:45 PM	0:25:00	70026-0	22757011		Brown	1	0.42	25	0.42	Refused cutout
12/9/07 5:08 AM	12/9/07 5:30 AM	12/9/07 6:30 AM	1:22:00	43970-3	22204013		Turner	1	1.37	82	1.37	Replaced Xfmer Combination
12/9/07 10:50 AM	12/9/07 12:00 PM	12/9/07 12:44 PM	1:54:00	40351-9	23202019		Warren	37	1.90	114	70.30	Jumper Burnt off OCR 39
12/10/07 3:10 PM	12/10/07 3:10 PM	12/10/07 3:20 PM	0:10:00	49053-2	22163199		Land	14	0.17	10	2.33	Planned-disc'd Xfmer to run urd svc
12/11/07 6:00 AM	12/11/07 7:15 AM	12/11/07 10:00 AM	4:00:00	15967-3	22066007		Adams	2	4.00	240	8.00	Refused cutout
12/11/07 6:20 PM	12/11/07 6:50 PM	12/11/07 7:00 PM	0:40:00	15967-3	22066007		Conder	2	0.67	40	1.33	Refused cutout
12/12/07 9:00 AM	12/12/07 12:00 AM	12/12/07 10:15 AM	1:15:00	31522-6	12445015		Blandford	1	1.25	75	1.25	House blew up next door, claims that what knocked it out
12/12/07 11:20 AM	12/12/07 11:20 AM	12/12/07 11:35 AM	0:15:00	35039-7	22285035		Turner	1	0.25	15	0.25	Disc'd to put up Primary Neutral
12/13/07 8:00 AM	12/13/07 9:10 AM	12/13/07 11:30 AM	3:30:00	10530-4	21479005		Masters	1	3.50	210	3.50	Changed out xfmer
12/14/07 12:15 PM	12/14/07 12:25 PM	12/14/07 12:35 PM	0:20:00	63673-8	21372002		Adams	2	0.33	20	0.67	Refused cutout
12/15/07 6:35 PM	12/15/07 7:10 PM	12/15/07 7:20 PM	0:45:00	79901-5	21305006		Loomer	2	0.75	45	1.50	Refused Xfmer
12/15/07 11:37 PM	12/16/07 12:15 AM	12/16/07 12:20 AM	0:43:00	31209-0	21908905		Loomer	1	0.72	43	0.72	Refused Xfmer
12/16/07 2:03 AM	12/16/07 2:30 AM	12/16/07 3:10 AM	1:07:00	10258-2	21458060		Turner	81	1.12	67	90.45	Cut tree; reset breaker
12/16/07 4:26 AM	12/16/07 5:25 AM	12/16/07 8:45 AM	4:19:00	47565-7	21989002		Loomer	1	4.32	259	4.32	Refused cutout
12/16/07 4:30 AM	12/16/07 5:20 AM	12/16/07 6:30 AM	2:00:00	58457-3	22602005		Loomer	85	2.00	120	170.00	Reenergized OCR #110
12/16/07 6:00 AM	12/16/07 12:00 AM	12/16/07 7:45 AM	1:45:00	32243-8	12213007		Wheatley	25	1.75	105	43.75	Lines Slapping from wind-Tied down new neutral
12/16/07 8:30 AM	12/16/07 8:50 AM	12/16/07 9:38 AM	1:08:00	37193-0	21426223		Loomer	54	1.13	68	61.20	Closed OCR
12/16/07 8:30 AM	12/16/07 9:00 AM	12/16/07 9:40 AM	1:10:00	50988-5	12832005		Wheatley	1	1.17	70	1.17	Tree fell across service
12/17/07 7:00 PM	12/17/07 8:00 PM	12/17/07 11:00 PM	4:00:00	76655-0	22546013		Mullins	1	4.00	240	4.00	New UUS 15
12/18/07 8:55 AM	12/18/07 9:15 AM	12/18/07 9:25 AM	0:30:00	80704-0	21305008		Masters	3	0.50	30	1.50	Refused Xfmer
12/18/07 5:05 PM	12/18/07 5:15 PM	12/18/07 5:25 PM	0:20:00	76495-1	12383058		CR/ML	1	0.33	20	0.33	
12/19/07 12:30 PM	12/19/07 1:15 PM	12/19/07 1:43 PM	1:13:00	54178-9	11896003		Warren	15	1.22	73	18.25	Squirrel on Xfmer
12/19/07 3:00 PM	12/19/07 12:00 AM	12/19/07 3:47 PM	0:47:00	59755-9	12355081		CR/ML	1	0.78	47	0.78	Cutout bad
12/19/07 4:13 PM	12/19/07 12:00 AM	12/19/07 4:53 PM	0:40:00	34264-2	11869018		Gribbons	339	0.67	40	226.00	Cut-in VA6 off of pole
12/20/07 8:05 AM	12/20/07 8:30 AM	12/20/07 8:45 AM	0:40:00	15665-3	22056003		Conder	13	0.67	40	8.67	Refused cutout
12/20/07 1:55 PM	12/20/07 12:00 AM	12/20/07 2:25 PM	0:30:00	2346-5	12279010		CR/ML	30	0.50	30	15.00	Refused cutout
12/20/07 9:31 PM	12/20/07 12:00 AM	12/20/07 10:10 PM	0:39:00	80639-8	12145025		Wheatley	2	0.65	39	1.30	Cattle rubbing guy/lower neutral and resag tap
12/21/07 9:00 AM	12/21/07 10:05 AM	12/21/07 10:15 AM	1:15:00	32340-2	11879022		Land	1	1.25	75	1.25	Refused Xfmer
12/23/07 2:30 AM	12/23/07 3:00 AM	12/23/07 3:30 AM	1:00:00	43379-7	22206305		Turner	6	1.00	60	6.00	Tree on Primary,Refused cutout
12/23/07 7:50 AM	12/23/07 8:55 AM	12/23/07 10:05 AM	2:15:00	20189-7	22574004		Masters	1	2.25	135	2.25	Service wire bad(repaired)
12/23/07 7:53 AM	12/23/07 8:20 AM	12/23/07 9:05 AM	1:12:00	74019-1	22601904		Brown	35	1.20	72	42.00	Tree on Primary,Refused cutout
12/23/07 10:30 AM	12/23/07 11:15 AM	12/23/07 1:15 PM	2:45:00	9301-3	21428062		Brown	4	2.75	165	11.00	Tree tore down service, repaired xfmer connection
12/23/07 1:15 PM	12/23/07 1:45 PM	12/23/07 4:20 PM	3:05:00	14444-4	22022044		Masters	1	3.08	185	3.08	Tree tore down service/chgd out xfmer
12/24/07 2:53 PM	12/24/07 3:05 PM	12/24/07 3:30 PM	0:37:00	11550-1	21564026		Land	4	0.62	37	2.47	Vibration/Put hot line clamp back on and tightened
12/26/07 8:35 AM	12/26/07 8:45 AM	12/26/07 8:55 AM	0:20:00	15388-2	22045005		Conder	1	0.33	20	0.33	Refused cutout
12/26/07 1:45 PM	12/26/07 12:00 AM	12/26/07 2:20 PM	0:35:00	17240-3	22144040		Brown	36	0.58	35	21.00	Ronnie Lamb hung into telephone & Overhead guy
12/27/07 10:04 AM	12/27/07 12:00 AM	12/27/07 11:45 AM	1:41:00	54179-7	12406003		Blandford	14	1.68	101	23.57	Refused cutout
12/27/07 2:10 PM	12/27/07 12:00 AM	12/27/07 2:55 PM	0:45:00	70922-0	22638047		Brown	2	0.75	45	1.50	Refused cutout
12/28/07 8:15 AM	12/28/07 8:40 AM	12/28/07 8:55 AM	0:40:00	79269-7	21449055		Adams	12	0.67	40	8.00	Found bird at cutout
12/29/07 8:15 AM	12/29/07 8:40 AM	12/29/07 10:45 AM	2:30:00	58979-6	22769033		Brown	2	2.50	150	5.00	Pestai full of Water.Conn burnt..Refused Xfmer
12/30/07 8:22 AM	12/30/07 9:10 AM	12/30/07 9:40 AM	1:18:00	4332-3	12402007		Conder	2	1.30	78	2.60	Refused cutout
12/30/07 5:20 PM	12/30/07 5:40 PM	12/30/07 6:00 PM	0:40:00	31931-9	22632015		Conder	2	0.67	40	1.33	Reset Xfmer
12/31/07 10:35 AM	12/31/07 12:00 AM	12/31/07 11:30 AM	0:55:00	67587-6	22519005		Conder	4	0.92	55	3.67	Refused cutout

12/31/07 10:35 AM	12/31/07 12:00 AM	12/31/07 12:30 PM	1:55:00 71117-6	22519002	Conder	2	1.92	115	3.83 Put up Primary
12/31/07 7:25 PM	12/31/07 7:40 PM	12/31/07 8:42 PM	1:17:00 72539-0	22152016	Brown	32	1.28	77	41.07 Tree hit Primary...Refused Cutout
12/31/07 10:44 PM	12/31/07 11:05 PM	12/31/07 11:10 PM	0:26:00 64361-9	12923015	Richards	39	0.43	26	16.90 Reset Recloser
12/31/07 10:48 PM	12/31/07 11:40 PM	12/31/07 11:58 PM	1:10:00 80596-0	21355017	Mullins	408	1.17	70	476.00 Wind blew tree & brushed line...took out station breaker

Customers Interrupted
Average Customers Served
Percentage Affected (SAIFI)(%)
Outage Time Per Average Customers (SAIDI)(Min)
Average Outage Time (CAIDI)(Min)
CAIDI=SAIDI/SAIFI

1,734 The total number of customers that were interrupted in the period.
25,172 The average number of customers served during the period.
6.89% The customers interrupted per average number of customer served.
5.70 The minutes of interruption per average number of customers served in the period.
82.75 The minutes an average customer interrupted was without power.
82.75

OUTAGE REPORT

DECEMBER

2007

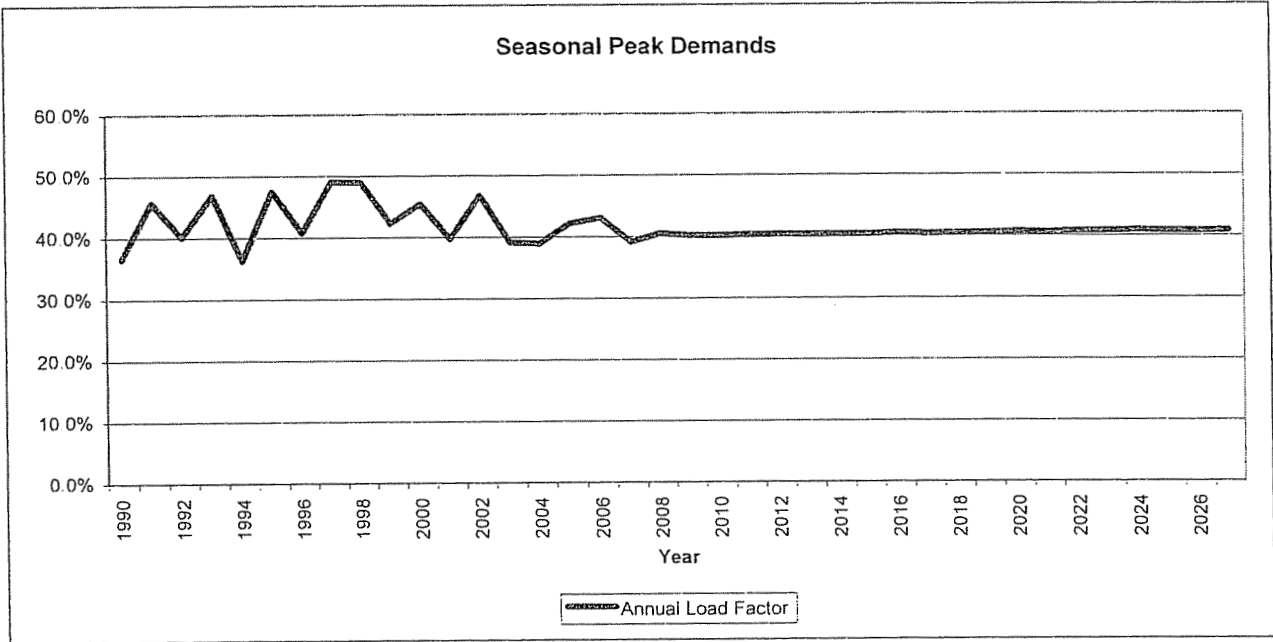
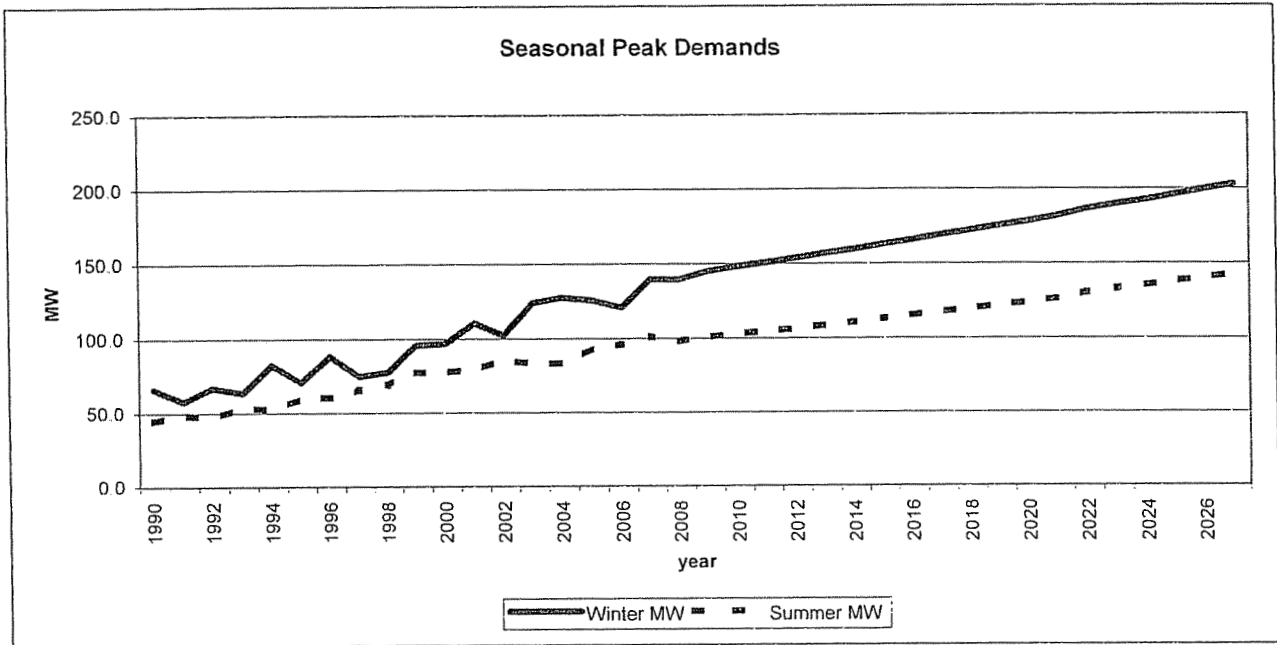
Without Planne

REPORTED	ARRIVED	COMPLETED	TIME	CUST #	ACCOUNT	OUTAGE	SERVICEMAN	CON	HR	MIN.	CON-HR	CAUSE OF OUTAGE
12/1/07 8:05 AM	12/1/07 8:35 AM	12/1/07 9:00 AM	0:55:00	66316-1	11892004		Blandford	3	0.92	55	2.75	Refused cutout
12/1/07 11:30 PM	12/2/07 12:30 AM	12/2/07 2:15 AM	2:45:00	20799-3	22632003		Adams	1	2.75	165	2.75	Changed out xfmer
12/2/07 11:29 AM	12/2/07 12:35 PM	12/2/07 1:10 PM	1:41:00	71117-6	22519002		Land	8	1.68	101	13.47	Refused cutout
12/3/07 5:45 PM	12/3/07 6:15 PM	12/3/07 6:30 PM	0:45:00	12670-6	21909014		Adams	8	0.75	45	6.00	Refused cutout
12/4/07 2:50 AM	12/4/07 4:30 AM	12/4/07 5:30 AM	2:40:00	746-8	11866004		Adams	338	2.67	160	901.33	Line Up reenergized OCR 69
12/4/07 7:00 AM	12/4/07 7:20 AM	12/4/07 8:40 AM	1:40:00	65789-0	22532021		Adams	3	1.67	100	5.00	Refused cutout
12/5/07 1:50 PM	12/5/07 2:20 PM	12/5/07 3:10 PM	1:20:00	74308-8	12203021		Wheatley	25	1.33	80	33.33	Re sag lines due to wind
12/5/07 7:20 PM	12/5/07 7:45 PM	12/5/07 8:40 PM	1:20:00	1489-4	12213009		Wheatley	2	1.33	80	2.67	Changed out xfmer
12/6/07 3:00 PM	12/6/07 3:00 PM	12/6/07 3:10 PM	0:10:00	35074-4	12259041		Wheatley	9	0.17	10	1.50	Birds on Xfmer
12/7/07 2:10 PM	12/7/07 2:25 PM	12/7/07 2:45 PM	0:35:00	71117-6	22519002		Warren	10	0.58	35	5.83	Refused cutout
12/8/07 7:20 PM	12/8/07 7:35 PM	12/8/07 7:45 PM	0:25:00	70026-0	22757011		Brown	1	0.42	25	0.42	Refused cutout
12/9/07 5:08 AM	12/9/07 5:30 AM	12/9/07 6:30 AM	1:22:00	43970-3	22204013		Turner	1	1.37	82	1.37	Replaced Xfmer Combination
12/9/07 10:50 AM	12/9/07 12:00 PM	12/9/07 12:44 PM	1:54:00	40351-9	23202019		Warren	37	1.90	114	70.30	Jumper Burnt off OCR 39
12/11/07 6:00 AM	12/11/07 7:15 AM	12/11/07 10:00 AM	4:00:00	15967-3	22066007		Adams	2	4.00	240	8.00	Refused cutout
12/11/07 6:20 PM	12/11/07 6:50 PM	12/11/07 7:00 PM	0:40:00	15967-3	22066007		Conder	2	0.67	40	1.33	Refused cutout
12/12/07 9:00 AM	12/12/07 12:00 AM	12/12/07 10:15 AM	1:15:00	31522-6	12445015		Blandford	1	1.25	75	1.25	House blew up next door, claims that what knocked it out
12/13/07 8:00 AM	12/13/07 9:10 AM	12/13/07 11:30 AM	3:30:00	10530-4	21479005		Masters	1	3.50	210	3.50	Changed out xfmer
12/14/07 12:15 PM	12/14/07 12:25 PM	12/14/07 12:35 PM	0:20:00	63673-8	21372002		Adams	2	0.33	20	0.67	Refused cutout
12/15/07 6:35 PM	12/15/07 7:10 PM	12/15/07 7:20 PM	0:45:00	79901-5	21305006		Loomer	2	0.75	45	1.50	Refused Xfmer
12/15/07 11:37 PM	12/16/07 12:15 AM	12/16/07 12:20 AM	0:43:00	31209-0	21908905		Loomer	1	0.72	43	0.72	Refused Xfmer
12/16/07 2:03 AM	12/16/07 2:30 AM	12/16/07 3:10 AM	1:07:00	10258-2	21458060		Turner	81	1.12	67	90.45	Cut tree; reset breaker
12/16/07 4:26 AM	12/16/07 5:25 AM	12/16/07 8:45 AM	4:19:00	47565-7	21989002		Loomer	1	4.32	259	4.32	Refused cutout
12/16/07 4:30 AM	12/16/07 5:20 AM	12/16/07 6:30 AM	2:00:00	58457-3	22602005		Loomer	85	2.00	120	170.00	Reenergized OCR #110
12/16/07 6:00 AM	12/16/07 12:00 AM	12/16/07 7:45 AM	1:45:00	32243-8	12213007		Wheatley	25	1.75	105	43.75	Lines Slapping from wind-Tied down new neutral
12/16/07 6:30 AM	12/16/07 8:50 AM	12/16/07 9:38 AM	1:08:00	37193-0	21426223		Loomer	54	1.13	68	61.20	Closed OCR
12/16/07 8:30 AM	12/16/07 9:00 AM	12/16/07 9:40 AM	1:10:00	50988-5	12832005		Wheatley	1	4.00	240	1.17	Tree fell across service
12/17/07 7:00 PM	12/17/07 8:00 PM	12/17/07 11:00 PM	4:00:00	76655-0	22546013		Mullins	3	0.50	30	4.00	New UUS 15
12/18/07 8:55 AM	12/18/07 9:15 AM	12/18/07 9:25 AM	0:30:00	80704-0	21305008		Masters	3	0.33	20	1.50	Refused Xfmer
12/18/07 5:05 PM	12/18/07 5:15 PM	12/18/07 5:25 PM	0:20:00	76495-1	12383058		CR/ML	1	0.33	20	0.33	
12/19/07 12:30 PM	12/19/07 1:15 PM	12/19/07 1:43 PM	1:13:00	54178-9	11896003		Warren	15	1.22	73	18.25	Squirrel on Xfmer
12/19/07 3:00 PM	12/19/07 12:00 AM	12/19/07 3:47 PM	0:47:00	59755-9	12355081		CR/ML	1	0.78	47	0.78	Cutout bad
12/20/07 8:05 AM	12/20/07 8:30 AM	12/20/07 8:45 AM	0:40:00	15665-3	22056003		Conder	13	0.67	40	8.67	Refused cutout
12/20/07 1:55 PM	12/20/07 12:00 AM	12/20/07 2:25 PM	0:30:00	2346-5	12279010		CR/ML	30	0.50	30	15.00	Refused cutout
12/20/07 9:31 PM	12/20/07 12:00 AM	12/20/07 10:10 PM	0:39:00	80639-8	12145025		Wheatley	2	0.65	39	1.30	Cattle rubbing guy/lower neutral and resag tap
12/21/07 9:00 AM	12/21/07 10:05 AM	12/21/07 10:15 AM	1:15:00	32340-2	11879022		Land	1	1.25	75	1.25	Refused Xfmer
12/23/07 2:30 AM	12/23/07 3:00 AM	12/23/07 3:30 AM	1:00:00	43379-7	22206305		Turner	6	1.00	60	6.00	Tree on Primary,Refused cutout
12/23/07 7:50 AM	12/23/07 8:55 AM	12/23/07 10:05 AM	2:15:00	20189-7	22574004		Masters	1	2.25	135	2.25	Service wire bad(repaired)
12/23/07 7:53 AM	12/23/07 8:20 AM	12/23/07 9:05 AM	1:12:00	74019-1	22601904		Brown	35	1.20	72	42.00	Tree on Primary,Refused cutout
12/23/07 10:30 AM	12/23/07 11:15 AM	12/23/07 1:15 PM	2:45:00	9301-3	21426062		Brown	4	2.75	165	11.00	Tree tore down service, repaired xfmer connection
12/23/07 1:15 PM	12/23/07 1:45 PM	12/23/07 4:20 PM	3:05:00	14444-4	22022044		Masters	1	3.08	185	3.08	Tree tore down service/chged out xfmer
12/24/07 2:53 PM	12/24/07 3:05 PM	12/24/07 3:30 PM	0:37:00	11550-1	21564026		Land	4	0.62	37	2.47	Vibration/Put hot line clamp back on and tightened
12/26/07 8:35 AM	12/26/07 8:45 AM	12/26/07 8:55 AM	0:20:00	15388-2	22045005		Conder	1	0.33	20	0.33	Refused cutout
12/26/07 1:45 PM	12/26/07 12:00 AM	12/26/07 2:20 PM	0:35:00	17240-3	22144040		Brown	36	0.58	35	21.00	Ronnie Lamb hung into telephone & Overhead guy
12/27/07 10:04 AM	12/27/07 12:00 AM	12/27/07 11:45 AM	1:41:00	54179-7	12406003		Blandford	14	1.68	101	23.57	Refused cutout
12/27/07 2:10 PM	12/27/07 12:00 AM	12/27/07 2:55 PM	0:45:00	70922-0	22638047		Brown	2	0.75	45	1.50	Refused cutout
12/28/07 8:15 AM	12/28/07 8:40 AM	12/28/07 8:55 AM	0:40:00	79269-7	21449055		Adams	12	0.67	40	8.00	Found bird at cutout
12/29/07 8:15 AM	12/29/07 8:40 AM	12/29/07 10:45 AM	2:30:00	58979-6	22769033		Brown	2	2.50	150	5.00	Pestal full of Water.Conn burnt..Refused Xfmer
12/30/07 8:22 AM	12/30/07 9:10 AM	12/30/07 9:40 AM	1:18:00	4332-3	12402007		Brown	2	1.30	78	2.60	Refused cutout
12/31/07 5:20 PM	12/31/07 5:40 PM	12/31/07 6:00 PM	0:40:00	31931-9	22632015		Conder	2	0.67	40	1.33	Reset Xfmer
12/31/07 10:35 AM	12/31/07 12:00 AM	12/31/07 11:30 AM	0:55:00	67587-6	22519005		Conder	4	0.92	55	3.67	Refused cutout
12/31/07 10:35 AM	12/31/07 12:00 AM	12/31/07 12:30 PM	1:55:00	71117-6	22519002		Conder	2	1.92	115	3.83	Put up Primary
12/31/07 7:25 PM	12/31/07 7:40 PM	12/31/07 8:42 PM	1:17:00	72539-0	22152016		Brown	32	1.28	77	41.07	Tree hit Primary...Refused Cutout
12/31/07 10:44 PM	12/31/07 11:05 PM	12/31/07 11:10 PM	0:26:00	64361-9	21923015		Richards	39	0.43	26	16.90	Reset Recloser
	12/31/07 11:40 PM	12/31/07 11:58 PM	1:10:00	80596-0	21355017		Mullins	408	1.17	70	476.00	Wind blew tree & brushed line...took out station breaker

Customers Interrupted
Average Customers Served
Percentage Affected (SAIFI)(%)
Outage Time Per Average Customers (SAIDI)(Min)
Average Outage Time (CAIDI)(Min)
CAIDI=SAIDI/SAIFI

1,378 The total number of customers that were interrupted in the period.
26,000 The average number of customers served during the period.
5.30% The customers interrupted per average number of customer served.
4.98 The minutes of interruption per average number of customers served in the period.
93.93 The minutes an average customer interrupted was without power.
93.93

INTER-COUNTY 2008 POWER REQUIREMENTS STUDY



CONSTRUCTION REQUIRED TO SERVE NEW MEMBERS

<u>NUMBER OF NEW SERVICES</u>	<u>24 MO. AVG</u>	<u>EST. 48-MONTH WORK PLAN PERIOD</u>				<u>TOTAL</u>
	<u>1/2006-12/2007</u>	<u>1/09-12/09</u>	<u>1/10-12/10</u>	<u>1/11-12/11</u>	<u>1/12-12/12</u>	
	1131	500	600	600	600	2300
<u>LINEAL FEET OF NEW LINE</u>						
Primary	349,340	141,667	170,000	170,000	170,000	651,667
Secondary	0	0	0	0	0	0
Service Drop	151,534	66,991	80,389	80,389	80,389	308,159
	500,874	208,658	250,389	250,389	250,389	959,826
Average Length	443	417	417	417	417	
<u>COST OF NEW SERVICES</u>	3,323,127	1,528,000	1,906,800	1,983,000	2,062,200	7,480,000
Average Cost	2938	3056	3178	3305	3437	3244
<u>COST OF NEW TRANSFORMERS</u>						
Number of Transformers	931	400	500	500	500	1900
Average Installed Cost	1312	1364	1419	1476	1535	
Total Cost of Transformers	1,221,887	545,600	709,500	738,000	767,500	2,760,600
<u>COST OF NEW METERS</u>						
Number of Meters	1356	700	700	700	700	2800
Average Installed Cost	173	180	187	195	203	
Total Cost of New Meters	235,029	126,000	130,900	136,500	142,100	535,500

SUMMARY

<u>CATEGORY DESCRIPTION</u>	<u>CFR CODE</u>	<u>1/05-12/05</u>	<u>1/06-12/06</u>	<u>1/07-12/07</u>	<u>1/08-12/08</u>	<u>TOTAL</u>
NEW DISTRIBUTION LINES	100	1,528,000	1,906,800	1,983,000	2,062,200	7,480,000
TRANSFORMERS & METERS	601	671,600	840,400	874,500	909,600	3,296,100

INCREASED SERVICE CAPACITY FOR EXISTING MEMBERS

	24 MO. AVG 1/2006-12/2007	EST. 48-MONTH WORK PLAN PERIOD				TOTAL
		1/09-12/09	1/10-12/10	1/11-12/11	1/12-12/12	
<u>COST OF SERVICE UPGRADES</u>						
Number of Service Upgrades	636	318	318	318	318	1272
Avg. Cost per Upgrade	2487	2586	2689	2796	2908	
Total Cost of Service Upgrades	1,581,732	822,348	855,102	889,128	924,744	3,491,322
<u>TRANSFORMERS</u>						
Number of Transformers Replaced	289	145	145	145	145	580
No. of Conversion Transformers (Associated with Code 300 Projects)		249	155	0	0	404
Less Transformers Salvaged (50%) (5 kva not included)		124	77	0	0	201
Avg. Installed Cost Per Transformer	1312	1365	1420	1477	1536	
Total Cost to Replace Transformers		368,550	316,660	214,165	222,720	1,122,095
<u>METERS</u>						
Number of Meters Replaced	636	318	318	318	318	1,272
Avg. Installed Cost Per Meter	173	180	187	195	203	
AMR retrofit meters		0	12400	12400	0	24800
Average Installed Cost AMR		0	146	146	0	
Total Cost to Replace Meters	110,028	57,240	1,867,014	1,869,558	64,554	3,858,366

SUMMARY

<u>CATEGORY DESCRIPTION</u>	<u>CFR CODE</u>	<u>1/09-12/09</u>	<u>1/10-12/10</u>	<u>1/11-12/11</u>	<u>1/12-12/12</u>	<u>TOTAL</u>
SERVICE DROPS	602	822,348	855,102	889,128	924,744	3,491,322
TRANSFORMERS & METERS	601	425,790	2,183,674	2,083,723	287,274	4,980,461

NEW DISTRIBUTION CONSTRUCTION ITEM - LINE CONVERSION

YEAR: 2010

Sulphur Creek Substation

CFR CODE: 301

ESTIMATED COST: \$8,100

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 3.24 miles of 1 phase distribution (34 transformers) from 7.2 to 14.4 KV. Install 1-333 KVA step transformer at line section 15731 and re-connect line section 15750 from the 7.2KV side of step down transformer 18025 to the 14.4 side. Replace poles and equipment as required. Line section affected by the conversion are as follows:

13, 15720, 15721, 15722, 15723, 15724, 15725, 15726, 15750, 15751, 15752, 15753, 15754, 15755, 16713, and 18.

Along Hwy 527.

REASONS FOR PROPOSED CONSTRUCTION

Low Voltage experienced at line sections:1447, 1457, 1458, 1459, 1463, 1471, 1472, 1475, 1475, 1476, 15732, 15732 thru 15741, 16, 20624, 20877, 20878, 20879, 21267, 21268. Whereas the end of line voltage at line section 16 was 116.9 Volt.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work the end of line voltage at line section 16 was improved from 116.9Volts to 118.6Volts. System losses will be reduced by 8 KW annually

ALTERNATIVE PLANS INVESTIGATED

Alternative 1 was a Line conversion of 1 phase to 2 phase 1/0AAC from line section 14100 to 22094, 3.55 mile. However the Benefit cost calculations proved this alternative to be the least cost effective., with the proposed construction having a benefit-cost-ratio of 200% and a 30yr energy savings of \$37,568.

NEW DISTRIBUTION CONSTRUCTION ITEM - LINE CONVERSION

YEAR: 2011
CFR CODE: 302

Sulphur Creek Substation
ESTIMATED COST: \$12,675

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 5.07 miles of 1 phase distribution (19 transformers) from 7.2 to 14.4 KV. Relocate one of the two step transformers, XFMR53126, to the beginning of line section 14119 and relocate the other step transformer to the end of line section 338. Replace R304, 50H recloser with a 70E., install 1-25E recloser at line section 14107, and install 1- 35E recloser at line section 15727. Replace poles and equipment as required. Line section affected by the conversion are as follows: 11564, 11565, 11567, 14109, 14110, 14111, 14112, 14113, 14114, 1426, 1530, 1531, 1532, 1534, 1535, 1536, 1541, 1542, 1543, 1546, 1547, 1557, 18131, 18132, 18743, 18744, 18745, 18746, and 338.

Near and along Gravel Pit Road.

REASONS FOR PROPOSED CONSTRUCTION

Load expected on line section 14109 is 395 KW, which is above the guideline rating of 250KW for 7.2KV lines.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, the single phase circuit will experience load levels within the stated guidelines.

ALTERNATIVE PLANS INVESTIGATED

Alternate 1 was to convert line sections 11564 to 338, 2.03 miles, from 1 phase to 2 phase 1/0 AAAC. However with a benefit cost ratio of 240%, and a 30yr energy savings of \$70,441, this recommended construction was the best solution.

NEW DISTRIBUTION CONSTRUCTION ITEM - LINE CONVERSION

YEAR: 2010

Loretto Substation

CFR CODE: 303

ESTIMATED COST: \$15,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 6.2 mile of 1 phase distribution (45 transformers) from 7.2 to 14.4 KV. Remove step transformer XFMR448. Replace R308, 50H recloser with a 50E recloser. Replace poles and equipment as required. Line sections affected by the conversion are as follows: 10929, 10930, 14230, 14231, 14232, 14233, 14234, 14235, 14236, 14237, 14238, 14239, 18585, 18586, 18587, 19871, 19970, 19971, 19973, 19974, 19975, 19976, 313, 4448, 4449, 4450, 4451, 4452, 4462, 4463, 4464, 4468, 4469, 4470, 4471, and 9327. Hwy 1183.

REASONS FOR PROPOSED CONSTRUCTION

Load expected on this single phase circuit is 302 KW which is above the guideline rating of 250 KW for 7.2 KV lines.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, the single phase circuit will experience load levels within the stated guidelines and better coordination will be obtained.

ALTERNATIVE PLANS INVESTIGATED

Alternate 1 was to convert line sections 14230,14231,14232,14233,14234,144,15173,15174,15175, and 15176 from 1 phase to 2 phase 1/0 AAAC. However the recommended construction had a benefit cost ratio of 66% and a 30yr energy savings of \$23,834.

NEW DISTRIBUTION CONSTRUCTION ITEM - LINE CONVERSION

YEAR: 2009
CFR CODE: 304

Loretto Substation
ESTIMATED COST: \$10,800

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 1.8 miles of 3 phase distribution (10 transformers) from 12.47 KV to 25 KV. Relocate 3 – 333 KVA step transformers, XFMR185, to line section 21184. Relocate OCD186, 3 – 70-4H reclosers to linesection 21184 just down line of step transformer. Replace poles and equipment as required. Line sections affected by the conversion are as follows: 10962, 14219, 14220, 14221, 14222, 14223, 18809, 21505, 21506, 315, 3724, 4246, 4258, 4259, 4405, and 4467.

Hwy 49 to Hwy 527.

REASONS FOR PROPOSED CONSTRUCTION

End of line voltage level fell below 118 volts at line section 4191, 117.9 volts.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, voltage levels will be within tolerance, phase loading will be reduced, and loading on reclosers will be reduced to a value less than their rating. System losses will be reduced by 12 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternate solution is to 2 phase line sections 15060, 15061, 15062, 169, and 18807, .9 mile. This alternative resulted in a lower benefit cost ratio and 30 year energy savings. The recommended construction will provide a 30 year energy savings of \$71,503.

NEW DISTRIBUTION CONSTRUCTION ITEM – THREE PHASE LINE

YEAR: 2009
CFR CODE: 305

Loretto Substation
ESTIMATED COST: \$139,365

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 3.42 miles of 1 phase distribution circuit to 3 phase 1/0 AAAC. Install 2 – 333 KVA step transformers at line section 22207. Install 2 – 50E reclosers at R85. Line sections affected by the conversion are as follows: 14355, 14356, 14357, 14358, 14359, 17978, 289, 14360, 14361, 14362, 14363, 16447, 16449, 22206, 22207, and 288.

Loretto Road.

REASONS FOR PROPOSED CONSTRUCTION

Due to industrial development and it's location, this will reduce the loading on the Marion Industrial and the Lebanon Substations. This proposal will allow for growth to be placed upon the Loretto Substation thus postponing substation upgrades in the Marion Industrial and Lebanon Substation.

RESULTS OF PROPOSED CONSTRUCTION

Greater system reliability and a 30 year energy savings of \$10,327.

ALTERNATIVE PLANS INVESTIGATED

Install a 11.2 MVA substation at the load center, However at \$682,000 this is not a justifiable option and doesn't promote efficiencies of our existing system.

NEW DISTRIBUTION CONSTRUCTION ITEM - LINE CONVERSION

YEAR: 2010
CFR CODE: 306

Loretto Substation
ESTIMATED COST: \$86,400

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 14.4 miles of 3 phase distribution (98 transformers) from 12.47 KV to 25 KV. Install 1-333 KVA step transformer at line section 15156. Remove 3 – 70L reclosers at line section 20972, R223-224-225. Remove 3 – 333 KVA step transformers at line section 22207. Remove 3 – 333 KVA step transformers at line section 15051. Remove 3 – 50H reclosers at line section 22207. Line section affected are as follows:10983, 10984, 10986, 14361, 14362, 14363, 16445, 16447, 16449, 16451, 21412, 288, 4116, 4117, 4118, 4119, 4131, 4132, 4136, 10845, 10990, 14270, 14271, 14272, 14273, 14274, 14355, 14356, 14357, 14358, 14359, 15052, 15053, 15054, 15084, 15085, 164, 172, 17286, 17287, 17288, 17289, 17290, 17292, 17293, 17796, 17978, 17979, 17980, 19059, 19443, 19444, 19832, 19833, 20972, 21025, 21026, 21027, 21423, 21424, 21702, 21805, 289, 307, 308, 3781, 4096, 4097, 4107, 4108, 4110, 4111, 4112, 4113, 4122, 4128, 4129, 4130, 4134, 4135, 4137, 4284, 4287, 4288, 4294, and 4797. Loretto Road.

REASONS FOR PROPOSED CONSTRUCTION

Due to industrial development and it's location, this project will reduce the loading on the Marion Industrial and the Lebanon Substations. This proposal will allow for this growth to be placed upon the Loretto Substation thus postponing substation upgrades in the Marion Industrial and Lebanon Substation.

RESULTS OF PROPOSED CONSTRUCTION

Greater system reliability and a 30 year energy savings of \$72,286

ALTERNATIVE PLANS INVESTIGATED

Install a 11.2 MVA substation at the load center, However at \$682,000 this is not a justifiable option and doesn't promote efficiencies of our existing system.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR

YEAR: 2011

Loretto Substation

CFR CODE: 307

ESTIMATED COST: \$81,190

DESCRIPTION OF PROPOSED CONSTRUCTION

Reconductor 2.3 miles of 3 phase distribution circuit with 1/0 AAAC. Line sections to be affected are as follows: 14270, 14271, 14272, 14273, 15051, 15052, 15053, 172, 20972, and 308

Loretto Road

REASONS FOR PROPOSED CONSTRUCTION

Due to industrial development and it's location, this project will reduce the overloading of the Marion Industrial and the Lebanon Substations. This proposal will allow for this growth to be placed upon the Loretto Substation thus postponing substation upgrades in the Marion Industrial and Lebanon Substation.

RESULTS OF PROPOSED CONSTRUCTION

Greater system reliability and a 30 year energy savings of \$5,163.

ALTERNATIVE PLANS INVESTIGATED

Install a 11.2 MVA substation at the load center, However at \$682,000 this is not a justifiable option and doesn't promote efficiencies of our existing system.

NEW DISTRIBUTION CONSTRUCTION ITEM – THREE PHASE LINE

YEAR: 2011

Loretto Substation

CFR CODE: 308

ESTIMATED COST: \$36,675

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .9 miles of 1 phase to 3 phase 1/0 AAAC. Install 3 – 50E reclosers at line section 15683. Install 1 – 35E recloser at line section 15756. Replace 1 – 25L recloser with 1 -35E recloser at line section 15761. Remove 1 – 50H at line section 15683. Remove 1 – 100 Amp 7.2 KV voltage regulator at line section Reg47813. Line section affected are as follows: 15683, 15684, 15685, 15686, 20694, 20695, and 29. Hwy 68.

REASONS FOR PROPOSED CONSTRUCTION

Coordination – Load on line section 15683 1ph – 1/0AAAC is 460 KW at 7.2 KV. This exceeds the 250 KW criteria and it improves system coordination.

RESULTS OF PROPOSED CONSTRUCTION

Loading on this circuit is within design criteria limits and improved coordination is achieved. System losses were reduced by 3 KW.

ALTERNATIVE PLANS INVESTIGATED

Convert 6.6 mi of distribution circuits from 12.47 to 25 KV beginning at line section 10846. However the recommended construction will provide a 30 yr energy savings of \$36,675.

NEW DISTRIBUTION CONSTRUCTION ITEM – THREE PHASE LINE

YEAR: 2009

Lebenon Substation

CFR CODE: 309

ESTIMATED COST: \$44,825

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 1.1 miles of 1 phase to 3 phase 1/0 AAAC. Replace R167, 1 – 50V4E with 3 – 100E reclosers.

Line sections affected are as follows: 14984, 14985, and 14986.

Barbers Mill Rd.

REASONS FOR PROPOSED CONSTRUCTION

50 V4E failed coordination with 85 Amps, 1224 KW which exceeds the 430 KW single phase criteria.

RESULTS OF PROPOSED CONSTRUCTION

To achieve proper coordination and improve system load balance.

ALTERNATIVE PLANS INVESTIGATED

No other options. Circuit is already 14.4 KV and a 1 phase 100 amp recloser will not coordinate properly.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009

Lebenon Substation

CFR CODE: 310

ESTIMATED COST: \$28,200

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 3.7 mile of 3 phase and 2.4 mile of 1 phase distribution (42 transformers) from 7.2/12.47 KV to 14.4/25 KV. Remove R88-424-425, 3 – 100-4E reclosers. Replace R180-311-325, 3 – 100L reclosers with 3 – 100E reclosers. Install 3 – 333 KVA step transformer at line section 15683. Replace R487, 1 - 70H recloser with 1 -70E recloser. Install 1 -333 KVA step transformer at line section 14314. Install 1 – 50H recloser on line section 14314 on the load side of step transformer. Replace poles and equipment and required. Line section affected are as follows: 10846, 11549, 11556, 11557, 11558, 14310, 14311, 14312, 14313, 14314, 14315, 14316, 14317, 14318, 15679, 15680, 15682, 15683, 15684, 15685, 15686, 1590, 1591, 1622, 1623, 1624, 1625, 1628, 1629, 1631, 1634, 1638, 1639, 1640, 1641, 1645, 1646, 1647, 1648, 1650, 1651, 1652, 1653, 1654, 1655, 20694, 20695, 20820, 20821, 20891, 20893, 21535, 21705, 29, 297, 298, 30, 31, 4791, 4792, and 4793.

Hwy 412.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R180-311-335, 3 – 100L reclosers failed minimum trip of 154 amps at line section 1645..

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, phase loading will be reduced, conductor in poor mechanical condition is replaced, loading on reclosers will be reduced to a value less than their rating, and better system 3 – phase load balance will be possible. System KW loss will be reduced annually by 18KW.

ALTERNATIVE PLANS INVESTIGATED

No other practical options available for this problem.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010

Perryville Substation

CFR CODE: 311

ESTIMATED COST: \$16,925

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 6.77 mile of 1 phase distribution (55 transformers) from 7.2 KV to 14.4 KV. Install 1 – 1000 KVA step transformer. Replace poles and equipment as required. Line sections affected are as follows:

10466, 10467, 10471, 10510, 12293, 12294, 12295, 13373, 13374, 13375, 13376, 13378, 13381, 13382, 13383, 16039, 16041, 16042, 16043, 16044, 16387, 16391, 18155, 18156, 18938, 6387, 6403, 6404, 6436, 6530, 6531, 6532, 6533, 6534, 6538, 6539, 6540, 6542, 6543, 6544, 6545, 6546, 6552, 6553, 6554, 6555, 6556, 6569, 6570, 6572, 6573, 6574, 6575, 703, 704, 8986, 8987, and 979. Webster Road.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels are below 118 volts on Line sections 10466, 10467, 13381, 13382, 13383, 18938, 6530, 6533, 6534, 6535, 6538, 6539, 6540, 6572, 6573, 6574, 6575, and 703, with the a minimum voltage of 116.8 at line section 6535.. Coordination failed at R54, 1 -704H recloser with 67 amps of load, which also exceeds the design limits.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, voltage levels are within design limits and coordination is achieved.

ALTERNATIVE PLANS INVESTIGATED

Alternate 1 was to Reconductor the above tap with 1 phase 1/0 AAAC. This did correct the voltage problem but acceptable coordination could not be achieved.

Alternate 2 was to convert .96 mile of 1 phase to 2 phase 1/0 AAAC. This was a viable solution, however, it did not comply with the systems 2007 Long Range Plan.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010
CFR CODE: 312

Perryville Substation
ESTIMATED COST: \$27,250

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 10.9 mile of distribution (54 transformers) from 7.2 KV to 14.4 KV. Install 1 – 333 KVA step transformer at line section 13584, Replace 1 – 50H recloser with 1 – 50E recloser at line section R162. Replace 1 – 35H recloser with 1 – 35E recloser at line section OCD152. Replace poles and equipment as required. Line section affected are as follows: 10645, 10646, 10660, 12169, 12170, 12171, 12172, 12173, 12174, 12175, 12176, 13570, 13571, 13572, 13573, 13575, 13576, 13584, 13585, 13586, 13587, 16059, 16060, 20075, 20076, 21264, 21265, 5556, 5559, 5560, 5566, 5611, 5614, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5638, 5639, 5640, 5642, 5723, 5727, 5728, 5729, 5730, 5731, 5732, 651, 652, 656, 657, 8913, and 9331. Hwy243

REASONS FOR PROPOSED CONSTRUCTION

Load expected on the single phase distribution circuit is 316 KW, which is above the guideline of 250 KW for 7.2 KV single phase circuits. Recloser R162, 1 – 50H recloser has 44 amps of load which exceeds is 70% capacity design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work coordination is achieved and phase loading will be reduced thus providing a better system 3 phase load balance scenario

ALTERNATIVE PLANS INVESTIGATED

Alternative one was to convert 3.9 mile of 1 phase to 2 phase i/o AAAC. However the proposed construction yielded a better benefit cost ratio and produced a 30 year energy savings of \$18,020.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR

YEAR: 2010

Peyton Store Substation

CFR CODE: 313

ESTIMATED COST: \$43,990

DESCRIPTION OF PROPOSED CONSTRUCTION

Replace 2.65 mile of 1 phase #4 ACSR with 1 phase 1/0 AAAC. Line sections affected are as follows:

14542, 14543, 14544, 14545, 14546, 14547, 14548, 14549, 14550, 14551, 14552, and 258.

Chelf Ridge Road.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels below 118 volts was encountered on 105 line section downline of line section 14552. The minimum end of line voltage at line section 19663 was 116.5 volts.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work construction the end of line voltage at line section 19663 is 118.1 volts. System losses will be reduced by 10 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Circuit is already 25 KV and coordination is achieved.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009
CFR CODE: 314

Peyton Store Substation
ESTIMATED COST: \$26,050

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 10.42 mile of 1 phase distribution (74 transformers) from 7.2 KV to 14.4 KV. Remove 1 – 333 KVA step transformer at line section 15534. Remove 1 -144 KVA/100Amp voltage regulator at line section 15535. Replace R84, 1 – 50H recloser with 1 -50E recloser. Replace poles and equipment as required. Line section affected are as follows: 11447, 11448, 11449, 14526, 14528, 14529, 14530, 14531, 14532, 14533, 14534, 14535, 15534, 15535, 15537, 15538, 15539, 15540, 15541, 15542, 15543, 15544, 15545, 15546, 15993, 15994, 17574, 17575, 18662, 18665, 18666, 18667, 18668, 18793, 18964, 18965, 2045, 2046, 2047, 2048, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2060, 2061, 2063, 2064, 2065, 2066, 2081, 2082, 2083, 2084, 2085, 2131, 2132, 21827, 261, 262, 58, 9297, 9299, 9300, 9301, 9302, 9303, 9314, 9482, 9711, and 9714. Woodrum Ridge Road.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels are less than 118 volts beginning at line section 15546. End of line voltage level at line section 18668 was 117.3 volts and there is 54 amps of load on R84, 1 -50H recloser thus failing proper coordination.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work construction, end of line voltage at line section 18668 was improved to 119.3 volts and proper coordination was achieved. System losses will be reduced by 15 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternate one was to reconnector 2.35 mile of 1 phase with 1/0 AAAC. However the proposed construction has a better benefit cost ratio and has a 30 year energy savings of \$49,841.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2012

Peyton Store Substation

CFR CODE: 315

ESTIMATED COST: \$28,220

DESCRIPTION OF PROPOSED CONSTRUCTION

Reconductor 1.7 mile of 1 phase #4 ACSR with 1 phase 1/0 AAAC. Remove REG42516, 1-100amp 7.2 KV regulator. Line sections affected are as follows: 100 and 15324.

Powell Road.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels are less than 118 volts beginning at line section 14481. The end of line voltage level is 117.5 at line section 9239.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work construction, end of line voltage at line section 14481 was improved to 121.2 volts. System losses will be reduced by 5 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to change the feed of this single phase circuit. However the voltage level after switching was still below 118 volts. The proposed construction has a 30 year energy savings of \$16,614.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009

Peyton Store Substation

CFR CODE: 316

ESTIMATED COST: \$36,125

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 14.45 mile of 1 phase distribution (95 transformers) from 7.2 KV to 14.4 KV. Remove 1 – 1000 KVA step transformer, XFMR53114 at the end of line section 46. Replace R35, 1 -70L recloser with 1 – 70E recloser. Replace OCD454, 1 -50H recloser with 1 -50E recloser. Replace poles and equipment as required. Line sections affected are as follows: 11492, 11493, 11494, 11495, 11497, 11498, 11499, 11500, 11501, 11502, 11589, 1406, 15610, 15611, 15612, 15613, 15614, 15615, 15616, 15617, 15618, 15619, 15620, 15621, 15622, 15623, 15624, 15625, 15626, 15629, 15630, 16513, 17083, 17086, 17087, 17090, 17093, 17712, 17713, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1827, 1832, 1833, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 19798, 19799, 19588, 19856, 20897, 20898, 20899, 21156, 21335, 21336, 44, 45, 9309, 9310, 9311, 9312, 9313, and 9318.

Lower Brush Creek

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels are less than 118 volts beginning at line section 17712 with the end of line voltage at line section 9309 of 116 volts.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work construction, end of line voltage at line section 9309 was improved to 120.7 volts. System losses will be reduced by 13 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to reconductor 1.41 miles of 1 phase #4 ACSR to 1 phase 1/0 AAAC. However this did not correct the voltage problem. The proposed construction corrects the voltage problem and will have a 30 yr energy savings of \$43,196

NEW DISTRIBUTION CONSTRUCTION ITEM – THREE PHASE LINE

YEAR: 2010

H.T. Adams Substation

CFR CODE: 317

ESTIMATED COST: \$40,330

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .3 mile of 2 phase to 3 phase 1/0 AAC and .8 mile of 1 phase to 2 phase 1/0 AAAC. Install 1 -70L recloser at line section R154. Line section affected are as follows: 11768, 11769, 11770, 11771, 11772, and 965. Mackville Road.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels are less than 118 volts beginning at line section 11773 and affects 31 line sections with the lowest end of line voltage being at line section 8943 and is 117.1 volts.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work construction, end of line voltage at line section 8943 was improved to 118.9 volts. System losses will be reduced by 6 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to install 1 – 167 voltage regulator at line section R154. This did correct the voltage problem, however, proper coordination was still a problem. Load balancing, age, and deterioration of the conductor was also a factor. The proposed work will have a 30 yr energy savings of \$27,104

NEW DISTRIBUTION CONSTRUCTION ITEM – VEE PHASE LINE

YEAR: 2012

H.T. Adams Substation

CFR CODE: 318

ESTIMATED COST: \$35,280

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .9 mile of 1 phase #4 ACSR to 2 phase 1/0 AAAC. Install 1 – 50H recloser at R61.

Line section affected are as follows: 11636, 15869, 15870, 15871 and 15872.

Oakland Lane

REASONS FOR PROPOSED CONSTRUCTION

Coordination and load balance. Recloser R61, 1 -50H has 43.4 amps of load which exceeds the design criteria limit of 35 amps.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work, coordination and load balance is achieved. System losses are reduced by 1 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to convert the 1 phase line from 7.2 KV to 14.4 KV. However this does not correlate with the 2008 long range plan. The proposed work will have a 30 yr energy savings of \$4,517.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009
CFR CODE: 319

H.T. Adams Substation
ESTIMATED COST: \$114,432

DESCRIPTION OF PROPOSED CONSTRUCTION

Reconductor 1.92 mile of 3 phase 1/0 AAAC with 3 phase 397 ACSR. Remove 3-70L reclosers at R24-33-136. Line sections affected are as follows: 12401, 12402, 12403, 12404, 12405, 12406, 12407, 15901, 15902, 18172, 20280, 20282, 20284, 20288, 20308, 20310, 21647, and 957.
Sparrow Road.

REASONS FOR PROPOSED CONSTRUCTION

Line capacity exceeds 75% of its thermal rating and voltage levels are below 118 volts at most extremities. This is due to the addition of a Wal-Mart and several small commercial loads new to this circuit.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work the end of line voltage levels are within acceptable design guide criteria and the conductor will be loaded within the guide lines. System losses will be reduced by 131 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to install 2.2 mile of a new 3 phase 1/0 AAAC circuit from the substation out to a major distribution split. However the benefit cost ratio and a 30 yr energy cost savings of \$591,780 warranted the proposed work be done.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009
CFR CODE: 320

Shelby City Substation
ESTIMATED COST: \$15,000

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .6 mile of distribution (44 transformers) from 7.2 KV to 14.4 KV. Remove 1 – 333 KVA step transformer at line section 13494. Replace R138, 1 – 70L recloser with 1 – 70E recloser. Replace poles and equipment and required. Line sections affected are as follows: 10592, 10593, 13474, 13475, 13476, 13477, 13478, 13494, 13495, 13496, 13497, 13498, 13501, 13502, 13503, 13504, 16435, 16437, 16977, 16978, 16980, 16981, 16984, 16986, 16987, 18159, 19562, 19563, 19839, 19841, 2112, 5807, 5810, 5947, 5953, 5970, 5981, 5982, 5983, 5986, 5987, 5988, 5989, 5990, 6096, 6097, 6111, 6116, 6119, 674, 682, 9074, 9075, 9485, and 9651.

Noscoe Road.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R138, 1 – 70L has 432 KW of load which is greater than the 250 KW for 7.2 KV as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are met and system coordination is better achieved. System losses will be reduced by 11 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to convert 1.7 mile of 1 phase #4 ACSR with 2 phase 1/0 AAAC. However, the benefit cost ratio was less for this alternative. The proposed work has a 30 yr energy savings of \$45,685.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010
CFR CODE: 321

Shelby City Substation
ESTIMATED COST: \$22,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 9 mile of 1 phase distribution (55 transformers) from 7.2 KV to 14.4 KV. Remove R110, 1 – 50H recloser. Install 1 – 70E recloser at line section 12785. Install 1 – 35E recloser at line section 11737. Remove 1 – 333 KVA step transformer at line section 12787. Replace pole and equipment as required. Line sections affected are as follows: 1031, 10747, 10764, 10765, 1095, 11737, 11738, 11739, 11740, 11741, 11742, 11743, 12020, 12021, 12022, 12788, 12789, 17309, 17310, 17311, 17822, 17823, 20991, 20992, 20993, 20994, 20995, 5073, 5080, 5081, 5082, 5083, 5084, 5085, 5086, 5087, 5088, 5089, 5102, 5105, 5106, 5107, 5108, 5109, 5173, 5182, 5183, 5203, 5205, 5214, 867, 8937, 8938, 9081, and 9115. Black Pike Road.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R110, 1 – 50H recloser has 460 KW of load this exceeds the 250 KW for a 7.2 KV distribution line outlined in the design criteria. System losses will be reduced by 3 KW annually.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are met and system coordination is better achieved.

ALTERNATIVE PLANS INVESTIGATED

No other viable options were available. The work construction for this project will have a 30 yr energy savings of \$12,459.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010
CFR CODE: 322

Shelby City Substation
ESTIMATED COST: \$65,200

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 1.6 mile of 1 phase 1/0 AAAC to 3 phase 1/0 AAAC. Install 2 – 70E reclosers at R104 for new phases. Line sections affected are as follows: 12783, 12784, 13751, 13752, 13753, 17735, 17772, 1774, 18706, and 868.

Hwy 127

REASONS FOR PROPOSED CONSTRUCTION

Line section 12783 has 1324 KW of load which exceeds the 430 KW on a 14.4 KV distribution line as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are met and system coordination is better achieved. System losses would be reduced by 7 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other viable options were available. The work construction for this project will have a 30 yr energy savings of \$29,072.

NEW DISTRIBUTION CONSTRUCTION ITEM – VEE PHASE LINE

YEAR: 2011
CFR CODE: 323

Shelby City Substation
ESTIMATED COST: \$19,600

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .5 mile of 1 phase #4 ACSR to 2 phase 1/0 AAAC. Install 1 – 70E recloser at R737. Line sections affected are as follows: 13361, 13362, and 13363.

Christman Spur Road.

REASONS FOR PROPOSED CONSTRUCTION

Load on line section 13361 is 993 KW which exceeds the 430 KW on a 14.4 KV as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are met and system coordination is better achieved. System losses would be reduced by 3 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other viable options were available. The work construction for this project will have a 30 yr energy savings of \$12,459.

NEW DISTRIBUTION CONSTRUCTION ITEM – VEE PHASE LINE

YEAR: 2012

Ballard Substation

CFR CODE: 324

ESTIMATED COST: \$27,440

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .7 mile of 1 phase #4 ACSR to 2 phase 1/0 AAAC. Line sections affected are as follows:

10073, 10099, 10100, 10101, 10102, 18479, and 7748.

Ballard Road.

REASONS FOR PROPOSED CONSTRUCTION

A new 30 plus lot all electric subdivision is being developed and the load on line section 10099 is 892 KW which exceeds the 430 KW on a 14.4 KV as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are met and system coordination is better achieved.

System losses would be reduced by 1 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other viable options were available. The work construction for this project will have a 30 yr energy savings of \$3,784.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2012

Ballard Substation

CFR CODE: 325

ESTIMATED COST: \$15,680

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert .4 mile of 1 phase #4 ACSR to 2 phase 1/0 AAAC. Line sections affected are as follows:

10126, 10127, 10128, and 19747.

Settlement Dr.

REASONS FOR PROPOSED CONSTRUCTION

Line section 10126 has 1303 KW of load which exceeds the 430 KW for 14.4 KV single phase circuits.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits are achieved.

System losses would be reduced by 1 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other viable options were available. The work construction for this project will have a 30 yr energy savings of \$3,784.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010

Thomas Gooch Substation

CFR CODE: 326

ESTIMATED COST: \$16,625

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 6.65 mile of 1 phase distribution (52 transformers) from 7.2 KV to 14.4 KV. Remove 1 – 333 KVA step transformer at line section 11955. Replace pole and equipment as required. Line section affected are as follows: 1044, 10518, 10519, 10520, 10521, 10524, 11955, 11956, 11957, 11958, 1959, 11961, 11963, 13402, 13403, 13404, 13405, 16100, 16101, 16807, 16811, 16815, 16817, 17327, 6177, 6179, 6182, 6311, 6312, 6314, 6315, 6321, 6322, 6329, 6330, 6331, 6332, 6333, 6335, 6336, 6337, 6338, 6339, 696, 8872, 8873, 8881, 8882, and OH206.

Ky Hwy 590

REASONS FOR PROPOSED CONSTRUCTION

Line section 11955 has 532 KW of load which exceeds the 430 KW for 14.4 KV single phase circuits.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits and proper coordination is achieved
System losses would be reduced by 9 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative was to convert .8 mile of single phase to two phase 1/0 AAAC conductor. The benefit cost ratio of 26.51% at a cost of \$ 31,360 was not the most economic option. Thus to conform to the recommendations of the long range plan the proposed work will have a benefit cost ratio of 90.03% and a 30 yr energy savings of \$ 34,673.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010

Thomas Gooch Substation

CFR CODE: 327

ESTIMATED COST: \$81,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 2 mile of 1 phase #4 ACSR to 3 phase 1/0 AAAC. Install 2 – 100E reclosers at line section R169.

Install 1 – 50E recloser at line section 12949. Line section affected are as follows:

12934, 12935, 12936, 12937, 12938, 12939, 12940, 12941, 12942, 12946, 12947, 12948, and 821.

Cartersville Road

REASONS FOR PROPOSED CONSTRUCTION

Line section 12934 has 1250 KW of load which exceeds the 430 KW for 14.4 KV single phase circuits and coordination cannot be achieved as is.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work design loading limits and proper coordination is achieved

System losses would be reduced by 9 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other alternatives were available for this situation. The proposed work will have a 30 yr energy savings of \$ 34,673.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2010

Highland Substation

CFR CODE: 328

ESTIMATED COST: \$29,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 11.8 miles of 1 phase distribution (48 transformers) from 7.2 KV to 14.4KV. Replace recloser R458, 1-35H recloser with 1-35E recloser. Replace recloser R127, 1-50H with 1-50E. Remove 1-333 KVA step transformer at end of LS210. Replace poles and equipment as required. Line section affected are as follows: 10858, 10859, 11104, 11122, 11123, 11124, 11667, 11668, 11669, 11671, 11672, 11673, 11675, 1324, 14026, 14885, 14886, 15971, 15972, 15973, 15974, 17901, 17903, 17905, 18607, 18608, 18609, 211, 21188, 212, 21367, 22023, 3519, 3643, 3644, 3645, 3646, 3647, 3648, 3649, 3650, 3651, 3653, 3654, 3655, 3661, 3666, 3667, 3668, 3669, 3670, 3676, 3677, 4775, 9241, 9244, and 9387.

Ky Hwy 1770.

REASONS FOR PROPOSED CONSTRUCTION

Voltage levels were less than 118 volts on line section 10858, 10859, 11122, 11123, 11124, 11671, 11672, 11673, 11675, 1324, 15971, 15972, 18607, 18608, 18609, 21188, 22023, 3519, 3651, 3653, 3654, 3555, 3666, 3667, 3668, 3670, 3676, 3677, 4775, 9241, and 9244, with the minimum voltage level of 117.03 at line section 9241.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work the voltage level at line section 9241 was increased to 120.03 and system coordination was improved. System losses would be reduced by 10 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative 1 was to reconductor 3.5 mile of 1ph #4 with 1ph #1/0AAAC which had a cost of \$59,760 and a benefit cost ratio of 13.52%.

Alternative 2 was to convert 2.6 miles of 1ph #4 with 2ph #1/0AAAC which had a cost of \$101,920 and a benefit cost ratio of 9.51%.

Thus to conform to the recommendations of the long range plan the proposed work is the best alternative and will have a 30 yr energy savings of \$ 37,430.

NEW DISTRIBUTION CONSTRUCTION ITEM – VEE PHASE LINE

YEAR: 2011

Garrard Substation

CFR CODE: 329

ESTIMATED COST: \$65,464

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 1.67 miles of 1 phase #4 ACSR to 2 phase #1/0AAAC. Install 1-50E recloser at recloser location R10. Line sections affected are as follows: 12459, 12460, 12461, 12462, 12463, 12464, 12903, 12904, and 828.

Kirksville Road.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R10, 1-50E has 63 amps of load which exceeds the 70% recloser loading as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work proper coordination is achieved and design criteria is met. System losses would be reduced by 3 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No apparent practical options were available. The proposed work is the best alternative and will have a 30 yr energy savings of \$ 11,215.

NEW DISTRIBUTION CONSTRUCTION ITEM – LINE CONVERSION

YEAR: 2009

Garrard Substation

CFR CODE: 330

ESTIMATED COST: \$13,000

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 5.2 miles of single phase distribution (36 transformers) from 7.2KV to 14.4KV. Remove 1-333KVA step transformer. Replace R403, 1-50H with 1-50E recloser. Replace poles and equipment as required. Line section affected are as follows: 12506, 12508, 12509, 12510, 12511, 12512, 15945, 15946, 18150, 18151, 19021, 21597, 22098, 22099, 8214, 8301, 8469, 8470, 8471, 8472, 8476, 8477, 8478, 8482, 8488, 8489, 9185, 926, 9538, 9894, 9895, 9949, and 9950.

Gillespie Pike.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R403, 1-50H has 76 amps of load which exceeds the 70% recloser loading as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work proper coordination is achieved and design criteria is met. System losses would be reduced by 13 KW annually.

ALTERNATIVE PLANS INVESTIGATED

Alternative 1 was to multi phase, however this option was too extensive to resolve the loading problem. The proposed work is the best alternative and will have a 30 yr energy savings of \$ 48,600.

NEW DISTRIBUTION CONSTRUCTION ITEM – VEE PHASE LINE

YEAR: 2011

Garrard Substation

CFR CODE: 331

ESTIMATED COST: \$50,960

DESCRIPTION OF PROPOSED CONSTRUCTION

Convert 1.3 miles of 1 phase #4 ACSR to 2 phase #1/0AAAC. Install 1-70E recloser at line section 13002.

Remove 1-100E recloser at line section R16. Line sections affected are as follows:

12996, 12997, 12998, 12999, 13000, 18599, 21349, 22214, and 13001.

Fall Lick Road.

REASONS FOR PROPOSED CONSTRUCTION

Recloser R16, 1-100E has 80 amps of load which exceeds the 70% recloser loading as outlined in the design criteria.

RESULTS OF PROPOSED CONSTRUCTION

As a result of the proposed work proper coordination is achieved and design criteria is met. System losses would be reduced by 2 KW annually.

ALTERNATIVE PLANS INVESTIGATED

No other observed practical alternatives were available. The proposed will have a 30 yr energy savings of \$ 7,477.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR LINE

YEAR: 2011

Loretto Substation

CFR CODE: 332

ESTIMATED COST: \$48,140

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.9 miles of deteriorated conductor with 1/0 AAAC. The line sections included are as follows: 14262, 14263, 14264, 14265, 14266, 14267, 14268, 14269, 17117, and 17117. Raley Road (Carryover from 2005-08 WP , Part 1 of 2 of code 337)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and #6A Copper, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work a decrease in maintenance costs would be expected and improved reliability should occur. System losses would be reduced by 1.9 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR LINE

YEAR: 2009

Loretto Substation

CFR CODE: 333

ESTIMATED COST: \$48,140

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.9 miles of deteriorated conductor with 1/0 AAAC. The line sections included are as follows: 15156, 15157, 15158, 15159, 15160, 15161, and 15162. Browning Rd. .

(Carryover from 2005-08 WP , Part 2 of 2 of code 337)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and #6A Copper, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work a decrease in maintenance costs would be expected and improved reliability should occur. System losses would be reduced by 3 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM -- RECONDUCTOR LINE

YEAR: 2011

Lebanon Substation

CFR CODE: 334

ESTIMATED COST: \$31,540

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.9 miles of deteriorated conductor with 1/0 AAAC. The line sections included are as follows: 14310, 14311, 14312, 14313, 14314, and 299. Jessietown, Hwy 289
(Carryover from 2005-08 WP , Part 1 of 2 of code 342)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6A Copper, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work a decrease in maintenance costs would be expected and improved reliability should occur. System losses would be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR LINE

YEAR: 2011

Lebanon Substation

CFR CODE: 335

ESTIMATED COST: \$44,820

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.7 miles of deteriorated conductor with 1/0 AAAC. The line sections included are as follows: 1514, 15761, 15762, 15763, 15764, 15765, 15766, 15768, 15842, 15843, 16835, 16839, 18252, 19120, 20412, and 20824. Moores Creek Rd.

(Carryover from 2005-08 WP , Part 2 of 2 of code 342)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6A Copper, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work a decrease in maintenance costs would be expected and improved reliability should occur. System losses would be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR LINE

YEAR: 2012

Perryville Substation

CFR CODE: 336

ESTIMATED COST: \$13,280

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor .8 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are 11634 and 1380. Shortline Road

(Carryover from 2005-08 WP , Part 1 of 4 of code 314)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .5 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Perryville Substation

CFR CODE: 337

ESTIMATED COST: \$41,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are 12280, 12281, 12282, 12283, 12284, 12285, 12286, 12287, 1228, 12289, and 982. Mitchellsburg Road (Carryover from 2005-08 WP , Part 2 of 4 of code 314)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Perryville Substation

CFR CODE: 338

ESTIMATED COST: \$18,260

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.1 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are 13638, 13639, and 637. Harberson Lane
(Carryover from 2005-08 WP , Part 3 of 4 of code 314)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .5 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Perryville Substation

CFR CODE: 339

ESTIMATED COST: \$33,200

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are 13373, 13374, 13375, 13376, 13378, 13381, 13382, 13383, 16043, 16044, 16387, 16391, 703, and 704. Webster Road
(Carryover from 2005-08 WP , Part 4 of 4 of code 314)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Perryville Substation

CFR CODE: 340

ESTIMATED COST: \$41,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
13298, 13299, 13300, 13301, 13302, 13303, 13304, 16399, 22187, and 721. Claunch Rd.

(Carryover from 2005-08 WP , Part 1 of 3 of code 344)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

H.T. Adams Substation

CFR CODE: 341

ESTIMATED COST: \$24,900

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
12352, 12353, 12354, 12355, 12356, 18057, and 964. New Dixville Road.
(Carryover from 2005-08 WP , Part 2 of 3 of code 344)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

H.T. Adams Substation

CFR CODE: 342

ESTIMATED COST: \$24,900

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
12390, 12392, 12394, 12395, 12396, and 959. Bellows Mill Rd.
(Carryover from 2005-08 WP , Part 3 of 3 of code 344)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2009

Sulphur Creek Substation

CFR CODE: 343

ESTIMATED COST: \$59,760

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 3.6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
14100, 14101, 14102, 21561, 22094, and 342 Millin Hill Road.
(Carryover from 2005-08 WP , Part 1 of 4 of code 335)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 7 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Sulphur Creek Substation

CFR CODE: 344

ESTIMATED COST: \$13,280

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor .8 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
11049, 11050, 11051, 11052, 11053, 11054, 11056, and 11057. Head Distillery Road.
(Carryover from 2005-08 WP , Part 2 of 4 of code 335)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .5 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012
CFR CODE: 345

Sulphur Creek Substation
ESTIMATED COST: \$9,960

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor .6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
10837, 10838, and 4805. Howardstown Road.
(Carryover from 2005-08 WP , Part 3 of 4 of code 335)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .5 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012
CFR CODE: 346

Sulphur Creek Substation
ESTIMATED COST: \$52,124

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.1 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are 11073, 11086, 11087, 3725, and 3788. Flats Road.
(Carryover from 2005-2008 WP, Part 4 of 4 of code 335)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .5 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Lancaster Substation

CFR CODE: 347

ESTIMATED COST: \$52,124

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 3.14 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
13022, 13023, 13024, 13025, 13026, 13027, 13028, 13029, 13030, 13031, and 802. Kirksville Road.
(Carryover from 2005-08 WP , Part 1 of 2 of code 330)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Lancaster Substation

CFR CODE: 348

ESTIMATED COST: \$81,340

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 4.9 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are : 12603, 12604, 12605, 12606, 12607, 12608, 12927, 12928, 12929, 12930, 823, and 908. Broaddus Branch Road.

(Carryover from 2005-08 WP , Part 2 of 2 of code 330)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Lebenon Substation

CFR CODE: 349

ESTIMATED COST: \$37,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.26 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
13974, 13976, 13977, 14963, 16120, 16121, 16569, 17188, 191, 21570, and 407. Hourigan Road.

(Carryover from 2005-08 WP , Part 1 of 4 of code 340)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by .1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Perryville Substation

CFR CODE: 350

ESTIMATED COST: \$43,160

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
12160, 12161, 12162, 12163, 12164, 12165, 12166, 16122, 16123, 16124, 16125, 18513, and 19037.
Riley Road.

(Carryover from 2005-08 WP , Part 2 of 4 of code 340)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Lebenon Substation

CFR CODE: 351

ESTIMATED COST: \$33,200

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
14446, 14447, 14448, 14449, 14450, 14451, 22110, and 273. Penick Road.
(Carryover from 2005-08 WP , Part 3 of 4 of code 340)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 0 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Lebenon Substation

CFR CODE: 352

ESTIMATED COST: \$33,200

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
13917, 13918, 13919, 13920, 13921, 13922, 14980, 14981, 14982, 14983, 16126, 16127, and 418.

Riley Road

(Carryover from 2005-08 WP , Part 4 of 4 of code 340)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012
CFR CODE: 353

Peyton Store Substation
ESTIMATED COST: \$26,560

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
15580, 15581, 15582, 15631, 15632, 43, and 51. Stepp Lane
(Carryover from 2005-08 WP , Part 1 of 4 of code 317)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 0 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2010
CFR CODE: 354

Peyton Store Substation
ESTIMATED COST: \$60,590

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 3.65 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are: 14532, 14533, 14534, 14535, 15534, 15535, 15537, 15538, 15539, 15540, 15541, 15542, 15543, 15544, 15545, 15546, 15993, 15994, 18964, 261, and 58.

Smith Road and Woodrum Road.

(Carryover from 2005-08 WP , Part 2 and 3 of 4 of code 317)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2010
CFR CODE: 355

Lebenon Substation
ESTIMATED COST: \$68,560

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 4.13 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are: 11346, 11347, 14324, 14325, 14326, 14327, 14328, 15406, 19396, 21496, 21498, 2497, 2515, 294, 295, and 85.

Arbuckle Creek Pike

(Carryover from 2005-08 WP , Part 1 of 3 of code 343)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Lebenon Substation

CFR CODE: 356

ESTIMATED COST: \$34,860

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.1 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are: 15426, 15427, 15428, 15429, 15430, 15431, 15432, and 80. Hwy 1157
(Carryover from 2005-08 WP , Part 2 of 3 of code 343)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Lebenon Substation

CFR CODE: 357

ESTIMATED COST: \$24,900

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are: 14333, 14334, 14335, 17843, and 292. Three Pines Road.
(Carryover from 2005-08 WP , Part 3 of 3 of code 343)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Shelby City Substation

CFR CODE: 358

ESTIMATED COST: \$39,840

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.4 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are : 10470, 12118, 12119, 12120, 12121, 12122, 12123, 12124, 12125, 12126, 19416, 19594, 20955, 6560, and 6561. Caldwell Road.

(Carryover from 2005-08 WP , Part 1 of 4 of code 313)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Shelby City Substation

CFR CODE: 359

ESTIMATED COST: \$21,580

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.3 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
10594, 13479, 13480, 13481, 13482, 13483, 21984, 5979, and 681. Pumpkin Run Road.

(Carryover from 2005-08 WP , Part 2 of 4 of code 313)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 0 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012
CFR CODE: 360

Shelby City Substation
ESTIMATED COST: \$48,140

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.9 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
13741, 13742, 13748, 13749, 13750, 18335, 21784, 21820, 22213, 608, and 611. Harris Creek Rd.
(Carryover from 2005-08 WP , Part 3 of 4 of code 313)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2009

Shelby City Substation

CFR CODE: 361

ESTIMATED COST: \$61,420

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 3.7 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are : 1040, 10463, 11983, 11984, 12532, 12533, 12534, 22011, 6586, 6682, 706, and 922. Engleman Lane. (Carryover from 2005-08 WP , Part 4 of 4 of code 313)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 4 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Gooch Substation

CFR CODE: 362

ESTIMATED COST: \$40,340

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.43 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are : 1073, 11794, 11795, 11796, 11797, 11798, 11799, 11800, and 20498. Fall Lick Rd.
(Carryover from 2005-08 WP , Part 1 of 3 of code 318)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2009
CFR CODE: 363

Gooch Substation
ESTIMATED COST: \$107,900

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 6.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
1061, 11681, 11682, 11683, 11684, 11685, 11829, 11830, 11853, 11854, 11910, 11911, 11912, 11913,
125, 14008, 14009, 14777, 14778, 14779, 14780, 14781, 14782, 14783, 14784, 14785, 15203, 15204,
15205, 15206, 15955, 15956, 17932, 18717, 18846, 20548, 20553, and 9823. Dripping Springs Road.
(Carryover from 2005-08 WP , Part 2 of 3 of code 318)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 7 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2010

Gooch Substation

CFR CODE: 364

ESTIMATED COST: \$58,100

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 3.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
1068, 11713, 11714, 11715, 11716, 11717, 11718, 11841, 11842, 11843, 11844, 11845, and 1313.
Hamilton Valley Road.

(Carryover from 2005-08 WP , Part 3 of 3 of code 318)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2009
CFR CODE: 365

Peyton Store Substation
ESTIMATED COST: \$26,560

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1.6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
14586, 14587, 14588, 14589, 17051, 17053, 17454, and 251. Wilson Ridge Road
(Carryover from 2005-08 WP , Part 1 of 4 of code 316)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 11 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012
CFR CODE: 366

Peyton Store Substation
ESTIMATED COST: \$76,360

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 4.6 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
11706, 11707, 11708, 11709, 11710, 11711, 11712, 1314, 15599, 15600, 15601, 15602, 15603, 15983,
15984, 20267, 20269, 20270, 20271, 20272, 21243, and 47. Reynolds Creek Rd.
(Carryover from 2005-08 WP , Part 2 of 4 of code 316)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 1 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2012

Peyton Store Substation

CFR CODE: 367

ESTIMATED COST: \$41,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 2.5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
14577, 14578, 14579, 14580, 14581, 14582, 20274, and 253. Snake Ridge Road.
(Carryover from 2005-08 WP , Part 3 of 4 of code 316)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 0 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2010
CFR CODE: 368

Peyton Store Substation
ESTIMATED COST: \$83,000

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 5 miles of deteriorated primary conductor with 1/0 AAAC. Line sections included are :
11324, 14541, 15637, 15638, 15639, 15640, 15641, 19662, 259, 2601, and 41. Shuck Creek Road.
(Carryover from 2005-08 WP , Part 4 of 4 of code 316)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and 6 A, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced by 2 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2010
CFR CODE: 369

Peyton Store Substation
ESTIMATED COST: \$35,300

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 1 mile of 3 phase deteriorated primary conductor with 1/0 AAAC. Line sections included are: 11324, 14541, 15637, 15638, 15639, 15640, 15641, 19662, 259, 2601, and 41. Shuck Creek Road.

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM - RECONDUCTOR LINE

YEAR: 2011

Peyton Store and Perryville Substation

CFR CODE: 370

ESTIMATED COST: \$73,040

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 4.4 miles of deteriorated conductor with 1/0 AAAC. The line section included are as follows: 13990, 404, 13960, 13961, 13962, 13963, 13964, 13965, 13966, 4929, 13578, 13579, 13580, 13581, and 654.

Burnt Cabin Knob and Mitchellsburg Knob Road.

(Carryover from 2005-08 WP, CFR 331)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR and #6A Copper, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work, a decrease in maintenance costs would be expected and improved reliability should occur. System losses will be reduced annually be approximately 3.2KW.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

NEW DISTRIBUTION CONSTRUCTION ITEM – RECONDUCTOR LINE

YEAR: 2012

Sulphur Creek Substation

CFR CODE: 371

ESTIMATED COST: \$73,040

DESCRIPTION OF PROPOSED CONSTRUCTION

Re-conductor 4.4 miles of deteriorated conductor with 1/0 AAAC. The line sections included are as follows: 15750, 15752, 15753, 16713, 15754, 15755, 13, 14109, 14110, 14111, 14112, 14113, 14114, and 338.

Soloma & Gravel Pit Road

(Carryover from 2005-2008 WP, CFR 341)

REASONS FOR PROPOSED CONSTRUCTION

The existing primary conductor, 4 ACSR, has been found to be in a deteriorated condition. Line sections identified were field checked for wire condition.

RESULTS OF PROPOSED CONSTRUCTION

As a result of this work a decrease in maintenance costs would be expected and improved reliability should occur. System losses would be reduced by 4.19 kW annually.

ALTERNATIVE PLANS INVESTIGATED

There are no alternative plans for this project.

SECTIONALIZING EQUIPMENT

CFR CODE: 603

ESTIMATED COST:

\$240,850.00

The system sectionalizing scheme was reviewed and fault currents were calculated based on the proposed system. The following table summarizes the type and sizes needed to maintain the system's sectionalizing scheme.

SUMMARY

TYPE	REMOVE	INSTALL	PURCHASE	COST	TOTAL COST
15H				\$ 3,850	-
25H	2			\$ 3,850	-
35H	10	9		\$ 3,850	-
50H	16	13		\$ 3,850	-
70H	1				-
25 4H				\$ 3,850	-
35 4H		1	1	\$ 3,850	\$ 3,850.00
50 4H				\$ 3,850	-
70 4H		3		\$ 3,850	-
100 4H				\$ 3,850	-
25L	2			\$ 4,200	-
35L	2	5	3	\$ 4,200	\$ 12,600.00
50L	4	1		\$ 4,200	-
70L	8	3		\$ 4,200	-
100L	3			\$ 4,200	-
15E				\$ 4,400	-
25E		1	1	\$ 4,400	\$ 4,400.00
35E	3	13	10	\$ 4,400	\$ 44,000.00
50E	7	16	9	\$ 4,400	\$ 39,600.00
70E	5	25	20	\$ 4,400	\$ 88,000.00
100E		11	11	\$ 4,400	\$ 48,400.00
50 4E	1			\$ 4,400	-
70 4E				\$ 4,400	-
100 4E	3			\$ 4,400	-
50 V4E	5				-
70 V6H				\$ 4,400	-
VWE				\$ 23,300	-
					\$ 240,850.00

*Note: 70 L used where 70 4H required.

VOLTAGE REGULATORS

CFR CODE: 604

ESTIMATED COST:

\$0.00

VOLTAGE REGULATORS

CWP ITEM	Retired		Added		
	50A, 7.2kv	100A, 7.2kv	50A, 7.2kv	100A, 7.2kv	100A, 14.4kv
100 amp, 14.4 kV		2			
Total					

SUMMARY

SIZE	RETIRE	INSTALL	PURCHASE	COST	TOTAL COST
50A, 7.2KV					
100A, 7.2KV	2			\$ 9,600.00	
100A, 14.4KV				\$ 10,300.00	\$0.00
					\$0.00

CAPACITORS BANKS

CFR CODE:

605

ESTIMATED COST:

\$0.00

CWP	CAPACITORS			
	Retire		Install	
	100, 7.2kv	50, 7.2 kv	100, 7.2kv	100, 14.4kv
TOTAL				

SUMMARY

SIZE	RETIRE	INSTALL	PURCHASE	COST	TOTAL COST
100, 7.2KV				\$0.00	\$0.00
50, 7.2 KV				\$0.00	\$0.00
100, 14.4KV				\$0.00	\$0.00
					\$0.00

* All Capacitor Banks are provided by East Kentucky Power.

POLE REPLACEMENT

CFR CODE: 606

ESTIMATED COST: \$2,080,000

DESCRIPTION OF PROPOSED CONSTRUCTION

Replace all poles, found physically deteriorated, by Inter County Energy Cooperative Corporation's pole inspection program. It is estimated that 140 poles per year will need to be replaced each year of the four year work plan

REASONS FOR PROPOSED CONSTRUCTION

Inter County Energy Cooperative Corporation has made an aggressive effort to locate and replace physically deteriorated poles throughout its system. The pole inspection and treatment program will begin a new cycle each year in accordance with our current program.

<u>COST OF POLE REPLACEMENTS</u>	<u>24 MO AVG</u> <u>1/06-12/07</u>	<u>EST 48-MONTH WORK PLAN PERIOD</u>				<u>TOTAL</u>
		<u>1/09-12/09</u>	<u>1/10-12/10</u>	<u>1/11-12/11</u>	<u>1/12-12/12</u>	
Number of Pole Replacements	272	140	140	140	140	560
Avg. Cost per Pole	\$1924	\$2,000	\$2,081	\$2,164	\$2,250	\$2,124
Total Cost of Pole Replacements (shown in thousands)		\$280	\$291	\$303	\$315	\$1,189
 <u>CFR CODE 606 TOTAL</u>						
Shown in thousands		\$280	\$291	\$303	\$315	\$1,189

CONDUCTOR REPLACEMENTS

CFR Code: 608

Estimated Cost: \$331,995

DESCRIPTION OF CONDUCTOR REPLACEMENTS

Reconductor approximately 5 miles of single phase conductor per year as required due to extreme age and deterioration.

<u>COST OF CONDUCTOR REPLACEMENTS</u>	<u>EST 48-MONTH WORK PLAN PERIOD</u>				<u>TOTAL</u>
	<u>1/09-12/09</u>	<u>1/10-12/10</u>	<u>1/11-12/11</u>	<u>1/12-12/12</u>	
Miles of Conductor replacement	5	5	5	5	20
Avg. Cost per mile	\$15,636	\$16,262	\$16,912	\$17,589	\$16,600
Total Cost of Conductor Replacements	\$78,180	\$81,310	\$84,560	\$87,945	\$331,995

DISTRIBUTION AUTOTRANSFORMERS

CFR CODE: 612

ESTIMATED COST:

\$0.00

CWP Item	Step Transformers					
	Retired			Added		
	167	333	1000	167	333	1000
1000 kVA auto transformer1			1			1
333 kVA auto transformer1		10			9	
Total		10	1		9	1

SUMMARY

SIZE	RETIRE	INSTALL	PURCHASE	COST	TOTAL COST
167					\$0.00
333	10	9	0		\$0.00
1000	1	1	0	\$14,000.00	\$0.00
					\$0.00

OTHER DISTRIBUTION ITEMS – SECURITY LIGHTS

CFR CODE: 701

ESTIMATED COST: \$690,230

DESCRIPTION OF PROPOSED CONSTRUCTION

Install approximately 920 out door security lights and poles as requested by members.

	<u>24 MO AVG</u> <u>1/06-12/07</u>	<u>EST 48-MONTH WORK PLAN PERIOD</u>				<u>TOTAL</u>
		<u>1/09 -12/09</u>	<u>1/10 -12/10</u>	<u>1/11 -12/11</u>	<u>1/12 -12/12</u>	
<u>COST OF NEW SECURITY LIGHTS</u>						
Number of Additions	453	230	230	230	230	920
Avg. Installed Cost	\$ 680	707	735	764	795	750
Total Cost of New Security Lights		\$162,610	\$169,050	\$175,720	\$182,850	\$690,230

AUTOMATED METER READING EQUIPMENT

CFR CODE: 705

ESTIMATED COST: \$796,500

DESCRIPTION OF PROPOSED CONSTRUCTION

Install the necessary software, equipment, and communications system to implement a fully automated meter reading system.

<u>Item</u>	<u>Category/Location</u>	<u>WP COSTS</u>
Server PC	Offc Equip	\$17,000
SW Licence	Offc	\$25,000
First Year Support Fee	Offc	\$20,000
Oasys Outage SW	Offc	\$8,000
Multispeak Integration PC	Offc	\$6,500
Misc - network conn, PC housing box, etc	Offc	\$15,000
Receiving Unit, x 14	Substation Equip	\$185,000
Outbnd Unit, x 14	Substation Equip	\$170,000
Feeder Detection, x 44	Substation Equip	\$17,000
Mod Transformers, x 14	Substation Equip	\$140,000
Remote Test Set	Substation Equip	\$3,600
Substation Test Set	Substation Equip	\$1,800
Fiber Cable, x 14	Substation Equip	\$1,600
Tranf Pad, x 14	Substation Equip	\$10,000
Substation Misc Wiring/Conduit, x 14	Substation Equip	\$22,000
CTs for OCR Bushings, 44 x 3 x \$150	Substation Equip	\$20,000
Cutouts/Lightning Arrest 14	Substation Equip	\$10,000
Spare Parts Kit	Substation Equip	\$8,000
Wireless Comms	Communications	\$85,000
Sub Equipment Labor, x 14 (1 sub per week/40hrs)	Substation Install Labor	\$31,000
 Total Automated Meter Reading Equipment		 \$796,500

PRESENT-WORTH COST ANALYSIS PROGRAM

Inter County Energy Cooperative Corporation uses a computer program to perform economical evaluation of alternative plans. The program calculates the present-worth of total annual costs for a given alternative. This information allows engineers to justify construction projects on an economical basis.

The engineer must supply various economic parameters and other information pertaining to circuit losses and load growth. The engineer must also supply cost estimates.

The following page demonstrates the usefulness of this program.

Southern Engineering developed the computer program.

PRESENT WORTH COST ANALYSIS

PLAN: Adams sub Problem 1 Solution 1
 ENGR: David Phelps

Economic Parameters

2009	YEAR CKT. PEAK DEMAND INITIAL LOSSES (kw) OCCUR
3.10	INFLATION FACTOR (%)
5.02	BLENDED INTEREST RATE (%) (& PW FACTOR)
1.25	TAXES & INSURANCE RATE (%)
3.64	DEPERECIATION RATE (%)
4.27	OPER & MTC RATE (%)
14.18%	FIXED CHARGE RATE (%)
\$5.22	DEMAND COST (\$/kW/MONTH)
\$0.04	ENERGY COST (\$/kWH)
505.0	CKT. PEAK DEMAND INITIAL LOSSES (kW)
1.65	AREA GROWTH RATE (%)
0.47	ANNUAL LOAD FACTOR (0.1 - 1.0)
0.26	LOSS FACTOR

TOTAL COST OF NEW CONSTRUCTION: **\$40,330**

PLAN SUMMARY (Accumulated Totals)

YEAR	MWH LOSSES	P.W. of INFLATED COST (\$)			TOTAL
		FIX CHR	MAINTNCE	LOSSES	
2014	7,412	30,464	0	362,122	392,586
2019	14,804	49,835	0	688,514	738,349
2024	23,509	64,998	0	1,039,062	1,104,060
2029	33,763	76,867	0	1,415,553	1,492,420
2039	60,064	93,431	0	2,254,186	\$2,347,616

BENEFIT/COST RATIO: **29.01%**

LOSS SAVINGS(30 years): **\$27,104**

Calculated Loss Savings Over 30 Years	
Without Plan	\$2,281,290
With Plan	\$2,254,186
Savings	\$27,104

YEAR	NEW CONSTRUCTION / MAINTENANCE	PRESENT EST COST		WITHOUT PLAN LOSSES		PROJECT KW LOSS SAVINGS	PLAN LOSSES		P.W. of INFLATED COST (\$) (PER YEAR AND ACCUMULATED)				TOTAL
		CONSTRCT	MNTNCE	PK-kw	ANN-kWH		PK-kw	ANN-kWH	FIX CHR	MAINTNCE	N.O.PLAN LOSSES	PLAN LOSSES	
				505.0	1,150,188	6.0	499.0	1,136,522	5,719	0	58,920	58,220	63,939
2009	1 Line Conversion .3 mi 2ph to 3ph 1/0	\$8,970	\$0										
	2 Line Conversion .8 mi 1ph to 2ph 1/0	31,360	0										
	3	0	0										
2010	1	0	0	521.8	1,188,457	0.0	515.6	1,174,337	5,445	0	59,767	59,057	64,503
	2	0	0		2,338,645			2,310,859	11,164	0	118,687	117,277	128,441
	3	0	0										
2011	1	0	0	539.2	1,228,000	0.0	532.8	1,213,410	5,185	0	60,627	59,906	65,092
	2	0	0		3,566,645			3,524,269	16,349	0	179,314	177,183	193,533
	3	0	0										
2012	1	0	0	557.1	1,268,858	0.0	550.5	1,253,783	4,937	0	61,499	60,768	65,705
	2	0	0		4,835,504			4,778,052	21,287	0	240,812	237,951	259,238
	3	0	0										
2013	1	0	0	575.6	1,311,076	0.0	568.8	1,295,499	4,701	0	62,383	61,642	66,343
	2	0	0		6,146,580			6,073,551	25,988	0	303,195	299,593	325,581
	3	0	0										
2014	1	0	0	594.8	1,354,699	0.0	587.7	1,338,603	4,477	0	63,280	62,528	67,005
	2	0	0		7,501,278			7,412,154	30,464	0	366,476	362,122	392,586
	3	0	0										
2015	1	0	0	614.6	1,399,772	0.0	607.3	1,383,141	4,263	0	64,190	63,428	67,690
	2	0	0		8,901,051			8,795,296	34,727	0	430,666	425,549	460,276
	3	0	0										
2016	1	0	0	635.0	1,446,346	0.0	627.5	1,429,162	4,059	0	65,114	64,340	68,399
	2	0	0		10,347,397			10,224,457	38,786	0	495,780	489,889	528,675
	3	0	0										
2017	1	0	0	656.2	1,494,469	0.0	648.4	1,476,713	3,865	0	66,050	65,265	69,130
	2	0	0		11,841,866			11,701,170	42,651	0	561,830	555,154	597,805
	3	0	0										
2018	1	0	0	678.0	1,544,194	0.0	669.9	1,525,847	3,680	0	67,000	66,204	69,884
	2	0	0		13,386,059			13,227,017	46,331	0	628,829	621,358	667,689
	3	0	0										
2019	1	0	0	700.5	1,595,572	0.0	692.2	1,576,615	3,504	0	67,963	67,156	70,660

7/10/2008

CIRCUIT ANALYSIS PROGRAM

Inter County Energy Cooperative Corporation uses a circuit analysis computer program to evaluate its distribution system under peak loading conditions. The program performs various circuit analysis, including voltage drop and fault current calculations based on RUS guidelines.

The following pages contain a sample voltage drop analysis performed by the software. The following information about the distribution system configuration is provided:

Sect	Section Identification number
Sect Type/Conductor	Identifies the section type (line, trans., etc.)
Cnf	Section Configuration (number of phases)
Prev Sect	Previous section
Pri Vlt	Primary Voltage
Base Vlt	Primary Voltage on a 120 volt base
Section Drop	Voltage Drop across line section
Accum Drop	Accumulated voltage drop from substation
Thru Amps	Calculated amps on section
% Cap	Percentage of rated capacity being reached
Thru KW	KW load through section
Thru KVAR	KVAR load through section
KW Loss	KW losses on section
% Loss	Loss percentage
Length	Length of section in miles
KW	KW load on section
KVAR	KVAR load on section
Cons on	Number of Consumers on section
Cons Thru	Number of Consumers through section

The information provided by this computer program is used to determine system deficiencies.

Milsoft Integrated Solutions developed the circuit analysis program.

EXISTING SYSTEM

**2008/2009 WINTER PEAK
LOAD LEVEL**

PROPOSED SYSTEM

**2012/2013 WINTER PEAK
LOAD LEVEL**

October 20, 2008

2009-2012 Construction Workplan (CWP)

Jim Jacobus, President & CEO
Inter-County Energy Cooperative

I have completed my review of the cooperative's 2009-2012 CWP, which was prepared by the Inter-County Engineering Department, and find it to be generally satisfactory for loan contract purposes. Approval to proceed with the proposed distribution system construction is contingent upon RUS's review and approval of an Environmental Report (reference 7 CFR 1794).

Headquarters, SCADA, and load management projects will be reviewed/approved by the Northern Regional Division office, as necessary. This action will be taken after their receipt of the CWP and other supporting documents (i.e., appropriate feasibility and engineering studies).

You should make a special effort to inform all of the cooperative's employees and contractors, involved in the construction of utility plant of any commitments made in the Environmental Report covering the construction of the facilities recommended in the CWP.

Changes (line improvements, tie lines, extensions, substations, etc.) in the CWP will require RUS approval. The environmental acceptability of any such changes shall also be established in accordance with 7 CFR 1794. The procedure for satisfying these environmental requirements shall be the same as that used in connection with this CWP approval.


It is your responsibility to determine whether or not loan funds and/or general funds are available for the proposed construction. If general funds are used, the requirements as outlined in 7 CFR 1717 need to be followed.

The construction shall be accomplished in accordance with RUS requirements. Specific reference should be made to 7 CFR 1726, Electric System Construction Policies and Procedures.

Mike Norman

Mike Norman
RUS Field Representative



A Touchstone Energy Cooperative 

RESOLUTION

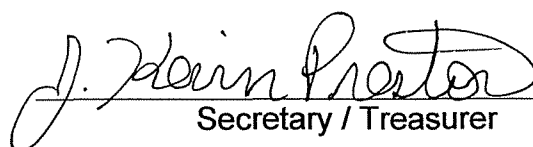
APPROVAL OF FOUR-YEAR WORK PLAN

WHEREAS, a Construction Work Plan for 2009-2012 in the amount of \$25,521,413.00 has been prepared by the Engineering Department of Inter-County Energy Cooperative Corporation.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Inter-County Energy Cooperative Corporation adopt the 2009-2012 Construction Work Plan as a course of action to be followed, or until amended with the approval of Rural Utilities Service.

CERTIFICATION

I, J. Kevin Preston, Secretary/Treasurer of Inter-County Energy Cooperative Corporation, do hereby certify that the above is a true and correct excerpt from the minutes of the meeting of the Board of Directors of Inter-County Energy Cooperative Corporation held on November 21, 2008 at which meeting a quorum was present.


Secretary / Treasurer

TESTIMONY OF MARVIN GRAHAM

Q1: Please state your name, address and occupation.

A1: My name is Marvin Graham. My mailing address is P. O. Box 87, Danville, KY 40423. I am the Vice President of Operations and Engineering for Inter-County Energy Cooperative, Inc.

Q2: What is your educational and work experience background?

A2: I have a Bachelor of Science Degree in Electrical Engineering from the University of Kentucky. I have 37 years of experience in the power industry with emphasis on power distribution, system planning, electric facility design and operations management. I have extensive experience in the areas of project management and implementing improvements of electric distribution systems. My work experience includes the following:

2005-Present	Inter-County Energy	Vice President-Operations & Engineering
2003-2005	Inter-County Energy	System Engineer
2000-2003	Inter-County Energy	Engineer
1972-2000	Kentucky Utilities	Technical Engineer I, II, Senior I, II Manager of Distribution Planning Manager of Standards

Q3: Have your duties at Inter-County Energy involved you in the preparation of the application and exhibits in this matter?

A3: Yes. My general responsibilities include supervision of the planning and design of electric distribution plant and facilities. I have reviewed the four-year Work Plan that has been filed in this matter.

Q4: Are you familiar with the application and attached exhibits filed by Inter-County Energy in this case?

A4: Yes, I am familiar with the four-year Work Plan and the system maps that are attached in Exhibit 2. To the best of my knowledge and belief, all facts stated in the application are true and correct.

Q5: Will you incorporate the contents of those exhibits and the application by reference in your testimony?

A5: Yes.

Q6: Does this conclude your testimony?

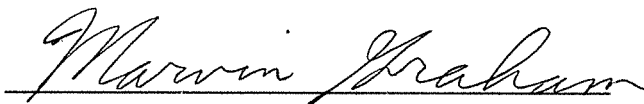
A6: Yes.

STATE OF KENTUCKY

COUNTY OF BOYLE

The foregoing testimony is true and correct to the best of my knowledge and belief.

This 30th day of MARCH 2009.



Marvin Graham

Vice President-Operations and Engineering

SUBSCRIBED AND SWORN to before me by Marvin Graham on the 30th day of March, 2009.



Notary Public, Kentucky State at Large

My Commission Expires: July 15, 2009