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THE EVOLVING ROLE OF ELECTRIC COOPERATIVES IN ECONOMIC  
DEVELOPMENT:  
A CASE STUDY OF OWEN ELECTRIC COOPERATIVE AND JACKSON ENERGY  
COOPERATIVE

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THESIS

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A thesis submitted in partial fulfillment of the  
requirements for the degree of Master of Science in  
Community and Leadership Development  
at the University of Kentucky

By

Whitney Prather Duvall

Owenton, Kentucky

Advisor: Dr. Patricia Dyk, Director of Graduate Studies, Community and Leadership  
Development

Lexington, Kentucky

2016

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## ABSTRACT OF THESIS

### THE EVOLVING ROLE OF ELECTRIC COOPERATIVES IN ECONOMIC DEVELOPMENT: A CASE STUDY OF OWEN ELECTRIC COOPERATIVE AND JACKSON ENERGY COOPERATIVE

In recent years, there has been a shift in among Kentucky rural electric cooperatives in regard to their stance on economic development. With this has been the employment of electric cooperative staff to help attract new industries and forge relationships with other local economic development-g geared groups to facilitate growth. Cooperative businesses have historically proved their resilience and deep-rooted connections within the communities they serve. In exploring two similar-sized electric cooperatives in Kentucky located in two very different regions of the state, considering socio-economic status, and interviewing key informants with local affiliated economic development groups, it becomes evident that electric cooperatives possess great potential to serve as a catalyst for economic development within their respective service territories.

**KEYWORDS:** Electric Cooperative, Economic Development, Social Capital, Networking, Service Territories

Whitney Prather Duvall

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## Chapter 1

### Introduction

There is a quote long-attributed to a farmer in rural Tennessee, who rose in church one Sunday and said “The greatest thing on earth is to have the love of God in your heart, and the next greatest thing is to have electricity in your house.”

The role cooperatives played in the electrification of rural America is amply lauded by academic researchers who have penned numerous journal articles and papers on the unique business structure, and rightfully so. Electric cooperatives made their historic mark during the 1930s movement aided by President Franklin D. Roosevelt and the New Deal in the United States.

Zeuli and Deller (2007) refer to electric cooperatives directly as “classic and impressive” examples of “people acting collectively...to provide a missing service to their economy” (11). The argument can be made that rural electric cooperatives are responsible for bringing about one of the most profound changes in United States agriculture history (Zeuli & Cropp, 2004).

And change it did—an improved quality of life and thriving small communities with sustainable economies trailed right along behind the establishment of electric cooperatives. The development that occurred—while foreseeable—was more of a side effect of pursuing the overriding goal of stringing miles and miles of line to people who up until that point, had been overlooked by urban, investor-owned utilities (IOUs).

Eighty years later though, electricity is old news; it is virtually everywhere. The mission and method may differ slightly in regard to electric cooperatives, but one value remains the same—concern for community (ICA).

In recent years, there has been a shift among Kentucky rural electric cooperatives in regard to their role in helping to stimulate economic development in the areas they serve.

The past couple of years in the rural electric industry have brought a new interest in attracting industry into regions of Kentucky to satisfy the need for jobs, growth, and the potential for improving the overall quality of life in the many small towns served by electric co-ops.

Many electric cooperatives tout they are “power pioneers,” having built the infrastructure for power to flow to communities that would thrive shortly after. The job doesn’t end there; an electric cooperative must successfully maintain its core business and the electrical infrastructure to ensure the flow of lifeblood electricity to communities.

Between this essential role and the traits inherent as a cooperative business, electric cooperatives may have inadvertently set themselves up to continue the pioneering spirit on behalf of their communities—by acting as a catalyst to local economic development.

One of the most prevalent indicators in electric cooperative’s new emphasis on economic development is the employment of staff whose sole role is centered on serving existing industrial and commercial customers; working with local and state economic development organizations and Chambers of Commerce; and cultivating relationships with prospective industrial and commercial customers looking to expand or relocate.

### **Theoretical Framework**

The economic and community development that trailed the establishment of electric co-ops and their power lines are no longer just an after-effect of their daily functions; therefore, in order to be an active facilitator, an electric cooperative must be more deliberate in its economic development efforts (Barkley, Freshwater, Markley, Zeuli, 2004).

In the past, cooperatives had been categorized in groups that allowed for a very limited view of cooperatives’ contributions to their communities. Hence, community development scholars David Barkley, David Freshwater, Deborah Markley, and Kimberly Zeuli introduced a new framework for analysis when examining cooperatives in relation to their role in the community they operate within, conceptualizing cooperative community development activities as “intentional” and “unintentional.”

(Barkley et al. 2004). Intentional activities are defined as those which happen as a result of the cooperative organizing development programs. Unintentional activities occur as the result or byproduct of a cooperative organizing or operating as a cooperative business structure (Barkley et al., 2004).

While the framework uses the phrase “community development,” the phrase “economic development” can easily be substituted because cooperatives are the basis for research. The cultivation of community development on the part of cooperatives goes hand-in-hand with that of economic development in a community or region.

In the cases of Owen Electric Cooperative and Jackson Energy Cooperatives, the two electric cooperatives examined in this thesis, social and economic contributions are intentional. Intentional outcomes occur when cooperatives have specific community development goals and invest their efforts and resources to serve their community beyond their core business. This intentionality is supported by the cooperatives’ employment of staff dedicated to the endeavor; annual operating budgets that allow for large power and development initiatives; and all other participation in activities designed to foster local and regional community and economic development.

According to Barkley, et al.’s (2004) framework, cooperatives that may be categorized as intentional can further be subdivided into three groups: extrinsic community development cooperatives; inherent community development cooperatives; and community cooperatives (Barkley, et al., 2004).

Extrinsic community development cooperatives take interest in and invest their resources in development endeavors outside of their core business. These additional development activities may not meet the needs of their members in the way the cooperative’s core business is designed to, but the activities are designed to help increase the level of economic activity and stimulate the need for its core function as a result. Barkley describes these activities as platforms for development, as they are often widely-used services such as cable television, sites for building and development, or in the case of this thesis, electric service (Barkley, et al., 2004).

Community Cooperatives are established with the objective of serving the community by providing specific products or services as influenced by social and economic development needs in the community. These types of cooperatives are organized top-down, after a local group sees a product or service that is lacking in the community and decides to rectify it (Barkley, et al., 2004).

Inherent community development cooperatives do not have separate community or economic development-g geared programs. They are, in and of themselves, filling the need that is lacking in a community; the core business of the cooperative and its community and/or economic development activity cannot be separated. Barkley gives the example of a housing development or credit, and adds that these types of cooperatives can not only be established bottom-up, by a group of people, but also top-down, by a local government or community development organization (Barkley et al., 2004).

Barkley et al.'s (2004) alternative framework speaks particularly well to a corporate style of business, like Owen Electric Cooperative and Jackson Energy Cooperative, because it also addresses practical issues that might hinder the level of engagement a cooperative can commit to a community or economic development activity. Cooperatives do place emphasis on the communities they serve, and they have more flexible financial abilities, requiring less of a return investment than an investor- or privately-owned business might. However, cooperatives cannot completely neglect the core business and the financial responsibilities that come with maintaining it. Factors articulated in the framework that may inhibit Owen Electric and Jackson Energy's involvement in community and economic development activities include: limited resources; limited links between cooperative members and the rest of the community, minimizing the incentive to engage; and the inability to identify a useful role that falls within the capacity of the cooperative (Barkley et al., 2004).

As limited as an electric cooperative may be from the standpoint of the corporate side, there are several aspects of cooperatives that set them up to be solid catalysts of development within a community, including the freedom from having to possess a bottom-line mentality regarding profits in order to satisfy a few shareholders.

## **Chapter 2**

### **Literature Review**

Studies have shown over and over that cooperatives possess the ability to subsist in areas and situations where other business would fail and appear to be the answer to market failure (Bhuyan & Leistriz, 2000). It has even been suggested that many businesses would have otherwise failed in the communities they exist in, had they not been set up as a cooperative (Zeuli & Deller, 2007).

Cooperatives occupy a unique niche that lends them the ability to act as place-based contributors; brokers for networking; and able to bridge social capital. The cooperative business model and the commonly-held cooperative principles provide the support needed to further the development activities of the cooperative within its community.

#### **Cooperatives as Place-Based Contributors**

Another positive attribute of cooperatives is that they are place- or community-based. While cooperatives do address market failure and provide a needed service, of particular note is their ability to overcome “historic barriers to development.” (Nembhard, 2014, p. 1). Cooperatives have the staying power, ability and interest no other type of business can boast; they are likely to employ and serve a large number of people from within their area. Because of their location-based interests and investment, they are also likely to stay in the area and use their innate ability to combine people, resources and capital to spur the community and economic development that is necessary (Nembhard, 2014).

#### **Cooperatives as Brokers for Networking**

The ability to network is critical to moving a community from a static, getting-by standard of life to one that is thriving and moving forward. A small community already has a tight, internal network in place, or a “bond.” The key is networking outside of a small community to pull in outside resources that contribute to improving the community’s quality of life, or “bridging.” (Majee & Hoyt, 2011).

This may be the point at which an electric cooperative realizes the magnitude and potential it possesses in advancing the development of its communities' economies. Owen Electric and Jackson Energy exercise that ability by designating a sector and staff dedicated to economic development, who work to attract and foster relationships with outside industries.

### **Cooperatives Bridging Social Capital**

Social capital is “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperative for mutual benefit” (Putnam, 1995, p. 67). Cooperatives in both their core business and through outside economic development activities can promote networking and interaction. Therefore, cooperatives in general, and in particular electric cooperatives, can become the broker for bridging social capital. After all, industries are looking at the electric provider as a key facet of the area and evaluating whether it can provide the level of service and reliability they require. The electric cooperative carries a lot of responsibility in maintaining a high level of service on behalf of the communities it serves, not only for the residential member-owners, but to appear attractive to outside industries—or that outside resource with which the community can bridge social capital and significantly improve its quality of living through jobs, monetary investments in the town or city, taxes garnered from the new industry, etc (Majee & Hoyt, 2011).

Because of its unique business structure, electric cooperatives are capable of being the perfect public relations officer and brokering a mutually-beneficial situation for both the incoming industry and the community receiving it. Electric cooperatives are place-based and locally-owned, and it can then be assumed that their members' interests are a priority. However, electric cooperatives' success depends on a solid understanding of the electric industry and good business sense, allowing it to appeal to the needs of non-place-based, non-locally-owned industries shopping for a locale conducive to their financial bottom line (Barkley, et al., 2004).



## **Cooperative Principles**

In recent years, many electric cooperatives have adopted seven core values set forth by the International Cooperative Alliance (ICA). The ICA's definition of cooperatives correlates well with the electric cooperatives in particular, stating cooperatives are:

based on the values of self-help, self-responsibility, democracy, equality, equity, and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility, and caring for others.” (ICA.coop, 2015).

Electric cooperatives' founders were the rural people—those who believed in self-help and taking the responsibility to get electric to their area, regardless of what it took to achieve it. The electric cooperative's very foundation is democracy and the equality of those who paid their \$5 membership fee to receive electricity.

Self-responsibility exists today, as electric cooperatives continue to improve the quality of life for its members, or those it serves with electricity. Barkley et al. (2004) maintains there is an “implicit link between cooperatives and communities” (17). Cooperatives have been identified as development tools with which to promote social empowerment and economic goals (Barkley et al. 2004).

## **The Cooperative Model**

Because cooperatives are not a well-known business model, they must often promote themselves and educate not only members of the cooperative and community, but to commercial, industrial, and government liaisons they may interface or network with (Nembhard, 2014).

This isn't implying a formal education session on cooperatives, but suggesting that cooperatives gain exposure and share what they do and what they can contribute through participating in beneficial community events, such as providing education workshops relevant to economic and community development activities or presenting research at planner, economic, ag-economic, and other professional meetings (Nembhard, 2014).

By increasing their exposure and involvement, cooperatives like Owen Electric and Jackson Energy can expand their networks and all considered, play a great role in ensuring the existence of the small, rural communities within their service territories.

### **Quantifying Cooperative Benefits**

A unique aspect of a cooperative, and certainly applicable in the instance of electric cooperatives and their communities and regions, is that they hold a mutually-beneficial relationship that spans the business, its employees, and the members of the community—members of the community often making up a portion of the employee base. The community as an entity thus benefits as well. Because of the nature in which they are established—by local people to fill a local need—cooperatives create employment and build capital in their community (Majee & Hoyt, 2011). The same is true for Owen Electric and Jackson Energy.

Nembhard (2015) also brings to light the emerging importance of qualitative measures in regard to evaluating the success and benefits cooperatives bring to the community development table. Such benefits include education and training for cooperative boards of directors, employees, as well as any type of workshops or education the cooperative offers to the community through cooperative employee involvement in outside, community issues and initiatives and the support lent to the launch of businesses.

Many involved with the aforementioned activities agree that great community and economic development can be attributed to the contributions of the local cooperative (Nembhard, 2015). Many of the proverbial dots can be connected using the ICA's principles so many cooperatives tout and align themselves with, including democratic member control; members' economic participation; and providing education, training, and information.

Nembhard (2015) notes that even though there is great evidence that community and economic development initiatives can easily be attributed back to the cooperative's efforts, there is often little documentation, thus the importance of taking note of "social accounting" and quantifying the value of efforts previously deemed immeasurable or overlooked.

Cooperatives not only tend to utilize local suppliers, but they anchor jobs and show their concern for communities by allocating a portion of their resources to local charities. The empowerment through local involvement, education and conversations, as well as the pooling of resources that are conducive to economic development are additional examples of efforts and impacts rarely quantified and documented (Nembhard, 2015).

Considering the beneficial attributes that cooperatives contribute to the communities they serve, it is important to explore the potential that lies within the electric cooperatives that serve rural portions of Kentucky. Not only do these cooperatives provide electric to areas that lack the economic activity critical to social and community development, they provide the broadly-used, platform service of electricity. Therefore, there lies a stratum of cooperatives within the state that possess an immense amount of influence, incentives, as well as monetary and human resources to spur economic development.

## Chapter 3

### Research Design

#### Research Objectives

What little research that currently exists on cooperatives—particularly non-agriculture cooperatives—appear to sing the praises of the local cooperative's ability to broker social, economic, and community solidarity and development.

The introduction of Barkley et al.'s alternative framework of intentional and unintentional community and subsequently economic development activities allows us to segue off the beaten, generic cooperative research path and hone in on an issue that is local, timely, and affects more than 100,000 individuals who reside and make their living in the state of Kentucky.

The culmination of key informant interviews along with research on Owen Electric Cooperative, Jackson Energy Cooperative, and associated regional economic development organizations seeks to answer what measures the electric cooperatives have undertaken to promote economic development within their territories, and what were the outcomes?

It is sought to answer the above overriding question by looking at how—if at all—Owen Electric and Jackson Energy's attitudes have changed in recent years concerning local economic development and the electric cooperatives' role in helping to facilitate positive economic development.

How do Owen Electric and Jackson Energy's attitudes toward and activities to promote local economic development differ between the two cooperatives?

The research conducted also sought to find what approaches—both independently and through community partnerships—have Owen Electric and Jackson Energy taken to encourage economic development within the geographical territories they serve.

## **Case Study Cooperatives**

Owen Electric and Jackson Energy cooperatives were selected as case study cooperatives for several reasons. Both cooperatives are comparable in the size of their membership and territory they serve. When considering their geographic location and accompanying economic attributes, Owen Electric and Jackson Energy are situated in very different areas of Kentucky that include equally different economic development challenges and subsequent activity to stimulate growth. Each is embedded in areas that have a network of established economic development organizations that enable examination of how electric cooperatives serve as brokers for networking.



**Owen Electric Cooperative.** Owen Electric Cooperative was begun in 1937 to provide electric service to rural residents of Owen County. By 1939, the cooperative had expanded to include Grant; Gallatin; Boone; Kenton; Campbell; Carroll; and Scott counties (owenelectric.com). As of February 2016, Owen Electric serves 58,840 members in its service territory. Geographic and demographic aspects of the territory and members the cooperative serve are diverse; this includes a very developed, urban area and population in northern Kentucky, near Cincinnati, as well as rural, remote areas that include farmland and agriculture-oriented people who work it.

**Jackson Energy Cooperative.** Jackson Energy Cooperative was incorporated in 1938 to provide electric service to southeastern Kentucky. The cooperative now serves 51,443 members in its seven-county territory which includes Clay; Estill; Jackson; Laurel; Lee; Owsley; and Rockcastle counties. Most of Jackson Energy's territory is rugged, with more developed areas lying along Interstate 75. Its membership consists heavily of people who have lived in the area for generations, working in the coal mining industry (Key informant interview, January, 2016).

Additional development organizations within the territory include the Kentucky Highlands Investment Corporation; Southeast Kentucky Economic Development; and the London-Laurel County Industrial Authority.

## **Methods**

After identifying Owen Electric and Jackson Energy as the subjects of a case study approach for the purpose of the project, it was important to identify key economic development organizations in the area.

### **Data and Information Collection**

Baseline numerical information was taken from Statebook.com, an economic development web site built specifically to address information relevant to prospective industrial or commercial businesses looking to expand or relocate. Data was concentrated to reflect only that derived from the counties and area served by Owen Electric and Jackson Energy.

There appears to be a general consensus among the many researchers and authors of articles centered on cooperatives that they are a solid business structure capable of bringing forth a lot of good, equally great is the consensus that most things ‘cooperative’ are difficult to quantify numerically.

Census and workforce data provides a baseline of information that is not only very specific but is gathered and prepared for economic development purposes. Examples of items included in the data are total population; median age per county; levels of education or degrees possessed among the population; median household income per county; and median earnings for workers per county (Statebook.com, 2016).

In addition to situating this study in secondary data, important insights came from key informant interviews. All those interviewed played a vital role within their respective organization’s community involvement. Interviewees provided insight stemming from their own background living and working within the geographical area; the identification of regional challenges; spoke on behalf of their organization’s economic development strategies and solutions; spoke in regard to local economic development insight; and provided insight as to the perception of their local electric cooperative.

In addition to these focal regional economic development organizations, East Kentucky Power Cooperative is an organization where key informants could provide insight regarding each electric cooperative. East Kentucky Power is owned by 16 electric distribution cooperatives, including Owen Electric and Jackson Energy. East Kentucky Power’s role is to provide power to the cooperatives that own it, and it does so with the four major power plants it owns and operates (ekpc.coop, 2011). Aside from generating electricity to the cooperatives that own it, East Kentucky Power houses an economic development department. Just as it provides power, the generation cooperative also provides economic development staff support to its cooperatives. Its teams have worked personally with both Owen Electric and Jackson Energy and in doing so have an extensive knowledge of the electric cooperatives and the economic and business climates in which they exist and operate.



This was done through internet searches, as well as the gleaning of Owen Electric and Jackson Energy web sites for mention of prominent area entities and potential partnerships between the electric cooperatives and particular development-oriented entities.

Member services representatives from each electric cooperative were also able to name organizations each had a working relationship with or felt was a prominent presence in the area.

Once all relevant economic and community development organizations had been identified, key informants within each organization were identified and contacted for an interview.

### **Interviews**

The sample consisted of 12 key informant interviews consisting of seven females and five males. The sample included the Chief Executive Officers, applicable senior level staff, and economic/business relations staff employed by Owen Electric and Jackson Energy. The interview sample was further supplemented with key informants or representatives of prevalent economic development organizations in the northern and southeastern Kentucky areas being studied. These organizations were identified by suggestions from the economic development staff employed by Owen Electric and Jackson Energy.

The suggestions were based on what organizations the electric cooperative staff observed as most visible in economic development activities in the Owen Electric and Jackson Energy territories, as well as those they had personally worked with in endeavors and activities on behalf of their cooperative.

These organizations include: Northern Kentucky Tri ED; the Kentucky Highlands Investment Corporation; Southeast Kentucky Economic Development; and the London-Laurel County Industrial Authority.

East Kentucky Power's economic development staff was also included in the interview sample given their electric cooperative-centric mission to support Owen Electric and Jackson Energy, as well as their extensive knowledge of statewide economic development issues that may be relevant to this project.

Initial contact with the previously identified organizations was made via telephone call. Once directed to the appropriate individual, the primary investigator of this project was introduced as well as with the disclosure and overview of the project being researched. The importance of the organization's input was explained and emphasized within the scheme of the project.

Each contact was agreeable to complete the interview. Due to research time constraints and the time and schedule constraints of the key informants, a copy of the informed consent letter and the interview questions were sent via e-mail to be completed as convenient and returned by a mutually satisfactory date.

The interview protocol had previously been developed in order to gain a multifaceted view of the key informant and the organization he or she represented. The questions were developed to not only give a factual representation of the area economic development organization, but they accommodated personal views and observations of the key informant as well. Nembhard (2015) reiterated the importance of information and benefits that are difficult to quantify exactly, hence the inclusion of questions regarding the background of key informants and loosely-defined questions within the interview. The interview questions as relayed to the key informants can be found in Appendix A.

The interview questions were divided into sections as indicated by the following headings in bold: **Background Information**; **Regional Challenges**; **Organization-based Strategies and Solutions**; **Local Economic Development Insight**; and **Perception of the Local Electric Cooperative**. (See Appendix A)

Background information, such as how long a key informant had lived in the area and worked for their organization served as a baseline of information about who was being interviewed. Most every key informant was either indigenous to the region being studied or had lived there for several years. In either case, it is fair to assume that all parties had a vested interest in their area for reasons outside professional reasons.

Key informants were asked questions that related to what they perceived as regional challenges for the area in which they work and what factors were most influential in its improvement with regard to economic development.

Having had their regional economic development organization identified as one with a working relationship with either electric cooperative, or as active locally and thus known for its efforts, questions were asked pertaining to the strategies each organization employs to try and achieve increased economic development. In particular, key informants were asked to define “economic development” as it exists to their individual organization. Answers to the aforementioned and subsequent questions in that section helped put in perspective each organization’s goals, their means, and where their interests align with the respective electric cooperative.

Gaining insight into local economic development needs was also important to establish what the vision across all organizations were as to what prospective industrial and commercial companies are seeking when they look for a region and location in which to build, expand or relocate.

Finally, questions were asked to gain an understanding of the perception of the electric cooperative in the area. It was interesting to find that largely, both electric cooperative key informants and those from outside economic development organizations perceived the cooperative similarly. One could assume that this is partially due to the fact that the key informants have lived in their respective area for several years and are familiar with how their communities operate as a whole and with where the electric cooperative factors into it.

Because the interviews were completed using e-mail, responses were already transcribed. Each return e-mail was saved in a designated folder in Outlook e-mail service to track who had responded and when. The attached interview responses were printed out and placed in a corresponding folder according to whether they were responding on behalf of Owen Electric or Jackson Energy. Interview responses from regional economic development organizations were placed in the folder of the electric cooperative corresponding to its area.

## Chapter 4

### Findings

Before delving into the broader issues particular to the areas served by both of these electric cooperatives, it is important to note the similarities and differences in demographic data. As previously noted in Figure 3.1, both Owen Electric Cooperative and Jackson Energy Cooperative serve a multi-county territory in Northern and Southeastern Kentucky, respectively.

Table 4.1 illustrates the demographics within the territories served by each electric cooperative as they relate to economic development interests.

TABLE 4.1, Electric Cooperative Territory Profile Chart

<b>Characteristics</b>	<b>Owen Electric Cooperative</b>	<b>Jackson Energy Cooperative</b>
Year Co-op Established	1937	1938
Members Served	58,840	51,443
# Counties Served	9	7
Average Median Age (All counties)	37.4 years	40.5 years
Bachelor's Degree or Higher, Age 25+	26.69%	10.53%
High School Degree or Higher, Age 25+	88.31%	71.66%
Average Median Household Income	\$50,477	\$26,767
Mean Travel Time to Work	24 Minutes	26 Minutes
Mean % of Persons Below Poverty Level (All counties)	16.5%	31.64%
# Major Airports Within 100 Mile Radius	4	1

*Source:* Statebook.com, indexmundi.com

As evident when comparing the characteristics in Table 4.1, Owen Electric and Jackson Energy are quite similar in the size of their membership (number of members served), the number of Kentucky counties they provide electric service to, and the time period in which they were established.

Historically speaking, after President Franklin Roosevelt signed the executive order establishing the Rural Electrification Administration in 1935 and the lending program was established, the period between 1937 and 1940 was a ‘boom’ time for the establishment of electric cooperatives. The communities behind the establishment of Owen Electric and Jackson Energy started right away to get electric service to their homes, farms and small businesses.

Further examination reveals that Jackson Energy’s region has a slightly older median-age workforce and a lower percentage of adults who have attained at least a high school education.

The largest demographic inequities fall with regard to the percentage of adults who have attained a bachelor’s degree or higher; the average median household income; and the mean percentage of persons who live under poverty level within the area served by the cooperative.

In each instance, the aggregate of the counties served by Owen Electric lay claim to more than double the percentage of adults with a bachelor’s degree or higher. Further research would need to be done to explore if that contributes to a much higher median household income, but one could deduce that a higher level of education would yield a more abundant, broader range of job options. The same deduction could be used to explain why the mean percentage of persons living below poverty level is less in an area with a significantly higher percentage of advanced education, or education attained beyond high school.

Another significant statistic is the number of major airports within a 100 mile radius of the northern and southeastern areas of Kentucky served by Owen Electric and Jackson Energy respectively. The availability of four airports within Owen Electric’s service territory implies increased accessibility and the necessary infrastructure—roads, urban development—to support such hubs. Also, the airplane as a vehicle to travel, transport, among other uses might be a major consideration for a large industry, and something that could hinder a business’s decision to locate in the southeastern portion of Kentucky, served by Jackson Energy.

Below, Table 4.2 gives a side by side illustration of each electric cooperative’s operating statistics. Again, you can see that the cooperatives are pretty evenly matched on the surface; they even rival one another on the number of miles of power lines that span their service territories.

TABLE 4.2, Electric Cooperative Business Profile Chart

<b>Characteristics</b>	<b>Owen Electric Cooperative</b>	<b>Jackson Energy Cooperative</b>
Year Co-op Established	1937	1938
Accounts Billed	58,840	51,443
Average kWh Use/Month (Residential)	1,115	1,194
Miles of Line	4,530	5,685
Consumers Per Mile of Line	13	9
Revenue Sources		
Residential	47.5%	78.69%
Industrial	38.53%	4.71%
Commercial	11.19%	14.00%
Other	2.78%	2.60%

*Source:* 2014 Owen Electric Cooperative and Jackson Energy Cooperative Annual Reports

Two items immediately stand out—Jackson Energy serves fewer members per mile of line and the makeup of the electric cooperative’s sources of revenue are completely different. Several inferences can be made into the economies of Owen Electric and Jackson Energy based on the different allocations within their sources of revenue.

The mathematics behind members per line is simple; the more members a utility has receiving electricity per mile of line, the more money it is going to make to pay for the poles, wire, and maintenance necessary to deliver the electricity, thus a larger margin of profit per mile of line. From the table below, it would be reasonable to say that Jackson Energy serves a more sparsely populated region where it must invest a more money with a slower return on the investment.

In regard to the sources of revenue for each electric cooperative, Owen Electric's membership is fairly evenly-matched as far as residential members (homes) and industrial and commercial members (businesses). Each population contributes approximately 50 percent each as sources of annual revenue.

On the other hand, Jackson Energy is much more reliant on its residential members, who make up more than 75 percent of its annual revenue. The fact that industrial and commercial members make up less than 5 percent and 14 percent of Jackson Energy's annual revenue is a clear indicator of the much-desired industrial presence and subsequent economic activity sought to develop in southeastern Kentucky.

### **Perceptions of Regional Economic Development Challenges**

The interview included questions asking key informants to discuss their perceptions of regional economic challenges. In each region, five key factors were repeatedly identified.

#### **Northern Kentucky.**

*The Tobacco Buyout.* Owen Electric Cooperative serves an economically diverse territory, from very rural and remote areas with sporadic small towns to the urban areas in northern Kentucky, just south of Cincinnati, Ohio.

For the more rural areas, the first major hurdle was presented in 2004 in the form of the tobacco buyout introduced as a part of the Fair and Equitable Tobacco Reform Act (Strupp, 2014). Gone was the standing price-support system maintained by the government, and under the buyout, farmers who took it would be a recipient of the \$10 billion set aside to be paid out annually over 10 years to compensate the tobacco farmers who lost production quotas they previously held (Hall, 2014). The final tobacco buyout payments were dispersed in 2014.

In an interview, a key informant likened the challenges farmers faced with the tobacco buyout to what southeastern Kentucky coal miners are now experiencing. The farmers had to look for other ways to sustain their families, possessing a limited skill set to do so with.



***Skilled and Reliable Workforce Deficit.*** Whether the workforce is based in the urban or rural regions of northern Kentucky, there is a deficit of skilled employees. There is a very evident lack of a science-technology-engineering-mathematics (STEM)-ready employee base. While there are efforts being made within schools to better STEM classes and increase available extra-curricular STEM programs, this will take time to hone and subsequently produce a consistent population of adequately-trained, employable workers.

An issue stemming from rural areas is that of those farmers affected by the tobacco buyout. They have been left, more than likely middle-aged and mid-career, to transition into another job that may require skill sets they do not possess.

In addition to the challenge of finding a skilled workforce, one key informant mentioned the challenge of finding drug-free, reliable workers. As an active liaison between Owen Electric and major corporations and businesses in northern Kentucky, the informant mentioned that commercial employers are finding it increasingly difficult to hire a reliable workforce because so many applicants will be unable to pass the required drug test.

***Education.*** As mentioned with regard to issue of harboring a skilled workforce in the northern Kentucky area, education was identified as a key area that needs to be strengthened to produce a consistent, desirable workforce.

East Kentucky Power's economic development team work with state agencies and often travel nationally to recruit businesses to Kentucky. They referenced the fact that industries looking to relocate or expand often employ site selectors and consultants who have already researched "90 percent of what the company wants to know, and their job is to basically eliminate [the location under scrutiny]."

One of the foremost pieces of information a company will look at is if there is a ready workforce in that location. In Owen Electric's territory, 88.31% of people ages 25 and older have received a high school education; those ages 25 and older who have attained a bachelor's degree or higher make up 26.69% of the population (statebook.com, 2015). It is important to note that, particularly in rural areas, quality people with the potential to be a part of a viable local employee base often leave to pursue employment elsewhere.

***State and Local Officials.*** State and local officials were identified as major players in the pursuit of bringing industry into northern Kentucky. The level of interest and charisma a judge executive or other elected official exudes to prospective industrial entities can make or break the recruitment.

Another issue is that of influential citizens, one that may be more prevalent in rural areas and small towns within Owen Electric's service territory.

"It seems like we get in our own way, so to speak. We want economic vibrancy, but some leaders and influential citizens reject the idea of attracting certain types of businesses," said one key informant.

Expressed too was the need for state and local officials, area economic development organizations, and schools to work together in concert to communicate and drop barriers, actively work together to produce a quality, viable local workforce.

***Physical and Technological Infrastructure.*** By and large, the rural areas Owen Electric serves has the greatest challenge when it comes to roads, access to interstates and airports, and high speed internet service.

The electric cooperative does interface with Kentucky Connected, a growing economic development entity for northern Kentucky, comprised of a partnership between six counties along the Interstate 71 corridor. Though they are located adjacent to an interstate, their abilities to attract new industry are hampered by the fact that they are still very rural where industry is concerned. Even with this enthusiastic initiative, it will take years for this area to develop necessary roads, bridges and high speed internet capabilities to attract industrial and commercial businesses.

Owen Electric is also active in the KentuckyWired project, which partners with local electric utilities to run high speed fiber optic cable across the utilities' existing poles to bring broadband internet service to communities that previously could not access it through existing ISPs in their area. It is important to note that KentuckyWired does not provide the internet service; it is an endeavor designed to place high speed internet infrastructure in hopes that local would extend their service to locations connected by KentuckyWired fiber optic cable.

Even with the KentuckyWired project underway, southeastern Kentucky was designated as the priority area and will reap the benefits of the project first. It may be several years until northern Kentucky's 'problem areas' are addressed.

### **Southeastern Kentucky.**

*Decline of the Coal Industry.* The overriding economic issue that lingers in the background for southeastern Kentucky is its long term dependence on the coal industry (Key informant interviews, January, 2016). For more than 200 years, Kentucky has been an important part of commercial coal production, ranked as the third-highest coal producer in the United States in 2013 as it contributed 80 million short tons of coal that accounted for 8.2% of US coal production (Coal Facts, 2014), (eia.gov, 2016).

Due to increasingly strict federal regulations, including the Environmental Protection Agency's Clean Power Plan, Kentucky utilities have been forced to make strides to move away from coal as the primary source of fuel. In 2014, 92% of Kentucky's electric generation was derived from coal (eia.gov, 2016).

*Skilled Workforce Deficit.* As a result of forced cutback in coal use, the demand has decreased thus the reduction in jobs that were vital to the economies and communities. Between 2011 and 2013, coal mine layoffs have resulted in the loss of more than 7,000 jobs in the southeastern portion Kentucky (Kentucky Coal Facts, 2014).

While the obvious issue may be excess of unemployed former coal miners, the real issue in terms of economic development is the lack of a trained workforce. An overriding theme among area economic development organization and Jackson Energy key informants was the acknowledgement of an overdependence on the coal industry. As a result, you have an abundance of people who need to move into other forms of employment, however, their skill set is limited to the coal mining industry.

East Kentucky Power economic development staff commented “You have someone who has been making \$32 an hour, bringing home \$70,000 a year taking an \$11 or \$13 an hour job because they have a family to support and lack the skills to move into another job making what they were making at the [coal] mine. People are spending hours on the road to drive to a job because they don’t want to relocate their families—they like where they live.”

***Education.*** Another issue that was repeatedly discussed in the interviews was the challenge of developing and maintaining a viable workforce. Reiterating what East Kentucky Power key informants discussed, one of the most important aspects companies and their site selector look at is the existing workforce available. More often than not, entry-level positions require at least a high school diploma to consider an applicant.

In the Jackson Energy territory, 71.66% of people ages 25 and older have received a high school education; those ages 25 and older who have attained a bachelor’s degree or higher make up 10.53% of the population (statebook.com, 2015). Unfortunately well-educated people, armed with the potential to help make up a viable workforce, will often leave economically underdeveloped areas to pursue employment.

***State and Local Officials.*** Local government officials can be viewed as a boon to a community or a hindrance to progress in regard to economic development. Another overriding theme from key informant interviews was the importance of judge executives and other elected officials’ charisma and willingness to work together across community and county lines as well as with outside industrial prospects. This was reiterated by key informants as a ‘make it or break it’ trait.

Another aspect mentioned within interviews was that of the relationship between multi-level government officials and schools. There was a need expressed for elected officials, economic development organizations and schools to work together to develop the workforce necessary to stimulate and maintain regional economic growth.

***Physical and Technological Infrastructure.*** Roads and accessibility and land are among smaller challenges faced by the territories served by Jackson Energy and other local economic organizations (Key informant interview, January, 2016).

Areas near Interstate 75 have very little accessibility issues and the quality of roads are not an issue; however, the further away from the interstate is another matter. While road improvement is an investment being made by the state of Kentucky, roads can take several years to improve and build, delaying or limiting adjacent areas' ability to be developed for economic growth.

Outside of a major interstate, there is only one major airport—Blue Grass Airport—within 100 miles of Jackson Energy's service territory. While it is small in the scheme of commercial airports, it does offer a variety of services: outside passenger travel including charter aircraft, airplane maintenance and storage (bluegrassairport.com, 2016). The aforementioned are all services that might be needed by a large corporation outside of regular travel for business purposes and could be hampered when distance from the southeastern region in question is considered.

The underwhelming presence of high-speed internet has also hindered growth in the southeast portion of the state. Efforts to connect are currently underway through programs like SOAR (Shaping Our Appalachian Region) and KentuckyWired.

SOAR, with which Jackson Energy has been involved, consists of several working groups who have made a commitment to build prosperity in the southeastern portion of Kentucky. The recommendation to build broadband service, expanding it into areas not currently served by local internet service providers (ISPs), was a product of the working groups within SOAR; this recommendation is now the active initiative KentuckyWired (soar-ky.org, 2016).

Currently, Kentucky is 47<sup>th</sup> in the US in regard to broadband speed and connectivity; the completion of the KentuckyWired project is projected to launch the state into 5<sup>th</sup> place (EKPC, key informant interview, January, 2016). While this prospect is promising and will be an asset once completed, this too will take several years to complete. For now, the lack of availability and quality internet service is yet another crippling challenge to economic development in that region.

### **Local Economic Development: Insight from Insiders**

**Prospective Industry Interests.** While regional challenges to economic development differed between the areas served by Owen Electric and Jackson Energy, there is definite consensus among all organizations represented in the interviews about what aspects of a community are important to prospective industries looking to settle and what benefits those industries bring to the community.

Does the utility matter? Of course it does. Utility rates; incentives; reliability; and other outage data are critical pieces to determining the cost of doing business in a location. Large industries are energy-intensive and therefore require a large amount of power. The rate at which they can purchase power is important to their bottom line.

Because of the abundance of coal and subsequently having some of the most inexpensive electricity rates in the country, Kentucky has traditionally been viewed as an attractive state to big industries.

As addressed in regard to regional challenges for both Owen Electric and Jackson Energy, workforce is a primary concern that electric cooperatives and regional economic development organizations hear frequently.

Not only is it the level and nature of education of the local workforce, but a level of loyalty businesses seek. East Kentucky Power's economic development staff have seen numerous instances where industries have chosen rural locations over urban because of the loyal workforce that tends to exist in those areas—in part because there are few other job options.

Rural cooperatives serve a large portion of rural Kentucky—it's why they were established in the first place. Some areas have seen great growth and since become urban in the past 80 years that electric cooperatives have existed, but many areas remain unchanged.

There is a culture of people, particularly in southeastern Kentucky that are tied to that region, and regardless of the fact that they must drive infinitely further to reach a lesser-paying job than what their former coal mining job paid, they do it happily because they want to raise their family where they've always been. It is their home.

### **Prospective Benefits from Increased Industry and Economic Development.**

'Place-based' is a recurring theme in the cooperative world. Cooperatives are borne from need and developed by local people for the benefit of local people; as a result there is an inherent love and regard for 'home.'

This is a win-win for industry in question and the available local workforce. A business thrives on efficiency and a solid workforce with little employment turnover—and thus less time and money spent training— contributes to a healthier bottom line. Businesses that relocate to a small community find themselves embraced by it. 'Job' is a small word with great meaning to rural communities; it allows a person to work in or very near where they consider their hometown. Qualified workforces are developed with the addition of new industry into the area.

A new industry brings added support to local schools, either through taxes, sponsorships or other donations. Businesses contribute to the volunteerism base for civic efforts and organizations and can help facilitate further progress and development within a community by their involvement via the Chamber of Commerce. Long term benefits that come with the addition of industrial and commercial businesses include an improved quality of life for those who live in the region and increased economic activity.

## **Electric Cooperative Contributions to Economic Development**

Several key informants noted that there are very few aspects in a person's life that an electric cooperative does not touch. Nembhard (2014) noted cooperative's abilities to spur community and economic development unlike any other business model or entity, in part because of their commitment to their locale.

As employers of a workforce largely comprised of local people and as a location-based service, it's hard for a cooperative to not care about the area it operates within. The aforementioned, paired with the fact a cooperative is defined as a cooperative because it is owned by the members it serves, the interest in its community inevitably exists other than providing electricity. What is good for the cooperative is good for the member—including selling more power to more large industrial members.

Barkley et al.'s (2004) framework introducing intentional and unintentional cooperative community development looks at how electric cooperatives are perfect brokers and catalysts for such local development.

Having long established power lines and providing electricity, electric cooperatives have in recent years realized the potential they have in furthering their established mission of improving the quality of life for their members through recruiting and retaining industrial and commercial members.

The recruitment of large commercial and industrial businesses has become increasingly competitive. Everyone realizes the economic impacts that a large employer can have on a community, and with the growth that has come with the electrification of rural areas by cooperatives, the cooperative and investor-owned utility playing field is much more even.

Urban areas, rich with both physical and technological infrastructure may be divided only by a Public Service Commission utility boundary line. To a bottom-line oriented business, it comes down to what the utility can offer in the way of rates, incentives and services.



It becomes necessary at this point for an electric cooperative to hone its economic development knowledge and prepare a menu of incentives and programs to attract industries into its territory.

**Cooperative Economic Development Staff.** The desire to delegate an area of complete focus to cultivating solid relationships with existing industrial and commercial members and working to attract new businesses has necessitated positions within Owen Electric and Jackson Energy. Owen Electric and Jackson Energy employ a Manager of Business and Government Relations and a Manager of Economic Development and Community Relations, respectively. The titles in and of themselves are self-explanatory and set forth the parameters of the position. In both instances, the staff acts as a liaison between the electric cooperative and existing commercial and industrial members as well as within their community and cooperative territory, partnering with other economic development-oriented organizations to foster more growth for the common good of the area.

Both Owen Electric and Jackson Energy encourage the involvement of their upper management and economic development staff in outside, regional organizations that are also economic development oriented. These organizations include local chambers of commerce, industrial authorities, and other regional task forces.

### **Organization-Based Strategies and Solutions: Owen Electric Cooperative**

**Defining Economic Development.** Owen Electric defines “economic development” within the confines of its organizations involvement as assisting in large business attraction, retention, and expansion efforts by keeping businesses informed of incentive programs offered by the cooperative through which they can benefit.

**Measuring the Success of Economic Development Endeavors.** Several factors are examined when gauging the success of Owen Electric’s economic development programs. Unemployment statistics; commercial and industrial sales growth; new and expanded industrial and commercial power loads; member feedback; and the level of participation in the commercial and industrial efficiency and incentive programs are all considered key factors.

**Resources Allocated to Pursue Economic Development.** Owen Electric invests through several different avenues that help foster economic development within their territory. This investment begins in-house through the suite of special discounted rates that cater to industrial and commercial members. There is also an economic development rider tariff that offers discounted electricity demand charges for new and expanded power loads.

There are financial rebates offered for commercial and industrial energy efficiency investments such as lighting retrofits and compressed air projects, while also offering “advanced reliability and power quality expertise” through Envision, a program offered in partnership with East Kentucky Power.

The Manager of Business and Government Relations is responsible for personally managing the relationship between Owen Electric and its industrial and commercial members, and ensuring their needs and concerns are addressed. Satisfaction among these large power load members is critical to their retention and factors into future expansion decisions.

Other efforts to foster local and regional economic development come from Owen Electric’s monetary investment as well as the investment of time and energy via staff involvement in various other initiatives and task forces. Involvement in these various organizations are taken on by other members of senior staff and the CEO.

Such organizations include, but are not limited to, serving on the Tri-ED Foundation Board of Directors; the Northern Kentucky Chamber of Commerce; the support and membership within county chambers of commerce; the Owen County Work Ready Task Force; and Kentucky Connected.

Monetary donations to worthy organizations working within northern Kentucky are also budgeted and given as considered appropriate.

## **Alternative Investments in Development.**

*Support of Education.* Aside from cooperative involvement in endeavors strictly geared toward economic development and the recruitment and retention of large industries, investments in education and local youth are also a priority.

Owen Electric offers speakers and presenters for organizations and schools to take advantage of; topics range from electrical safety and energy efficiency for businesses and homes to programs about the cooperative itself and its business structure.

An annual scholarship program is also offered; it awards 10, \$1,000 scholarships to college-bound or current college students who are Owen Electric members or the children of those members.

Owen Electric also participates in the Kentucky Rural Electric Washington Youth Tour, which is an annual, week long, all-expenses-paid trip to Washington, DC, that is open to select high school students whose homes are served by electric cooperatives. Owen Electric sends four students each year.

*Support of Employee Civic Activities.* While economic development is central to the subject of this project, it is important not to neglect the fact that both electric cooperatives being studied are at their core, a business. Limited resources; limited links; minimal incentive to participate and engage; or the inability to identify a useful role within an initiative may all be issues that hinder the commitment of the Owen Electric's participation on a corporate level.

However, this issue is circumvented by Owen Electric encouraging and supporting its employees to participate in their local civic organizations.

The electric cooperative boasts several employees who participate in groups such as Rotary International; 4-H Youth Development; local fair and park boards; volunteer fire departments; serve as magistrates and in other city and county government capacities.

Though the aforementioned activities may not be participated in as a formal representation of Owen Electric by its employees, the encouragement and support employees receive to become and remain involved can be perceived as another way the electric cooperative supports the movement and growth of the communities it serves through social empowerment (Barkley et al., 2004).

### **Organization-Based Strategies and Solutions: Jackson Energy Cooperative**

**Defining Economic Development.** Jackson Energy defines “economic development” as the availability of jobs in the region, based on the thought that if there is industry and commerce, there will be jobs available for the citizens who live in this area. In an area plagued by high unemployment and poverty, jobs are named as the number one initiative and have evolved as the definition of economic development in the region.

**Measuring the Success of Economic Development Endeavors.** Like Owen Electric, unemployment rates and the number of new industrial and commercial businesses locating in the area are a factor used by Jackson Energy to determine the success of their economic development programs.

Jackson Energy is also able to offer loans or grants to companies that bring new jobs to the region through the United States Department of Agriculture (USDA) Rural Utilities Service. Participation in this program is also used as an indicator of economic growth success.

**Resources Allocated to Pursue Economic Development.** Jackson Energy employs a host of diverse investments into its industrial and commercial members as well as the communities it serves to help create economic development.

Few things differ between Jackson Energy and Owen Electric’s core industrial and commercial member rate and efficiency program offerings, outside Jackson Energy’s ability to offer USDA Rural Utilities Service loans to prospective businesses.

Special discounted rates are available to large businesses that will create new jobs in the area. Financial rebates are offered to industrial and commercial members through the investment of energy efficiency improvements such as lighting retrofits and compressed air projects. Jackson Energy also offers Envision services through East Kentucky Power. A Manager of Economic Development and Community Relations is employed to manage all industrial and commercial member needs, concerns and participation in special rates or programs offered by Jackson Energy.

The ability to offer low-interest loans and grants through the USDA Rural Utilities Service is a great boon to Jackson Energy's economic development effort and unique to this particular cooperative within the scope of the project.

Rural Economic Development Loan and Grant programs provide funding to rural projects through local utility organizations. Under the program, the USDA can provide Jackson Energy with zero interest loads which they, in turn, pass through to local businesses for projects that will create and retain employment in rural areas. Economic feasibility is a major consideration in whether a business's project will receive funding (rd.usda.gov, 2016).

The participation of upper management, from the CEO to the Manager of Economic Development and Community Relations, is an important contribution to growing the Jackson Energy Cooperative territory's economy as well.

According to Jackson Energy key informants, various staff is actively involved with more than 60 non-profit organizations in its region. Such organizations include area chambers of commerce and the electric cooperative is also engaged in the "Work Ready" initiative.

Jackson Energy encourages the involvement of its staff within various civic organizations and groups to stretch beyond the conventional means and capabilities of the electric cooperative itself.

Another program unique to Jackson Energy within the scope of the project is the Operation Round-Up Program. This program is funded by cooperative members who voluntarily round up the cents portion of their electric bill each month. According to Jackson Energy, this program has allowed it to contribute more than \$200,000 to organizations for community improvement projects.

### **Alternative Investments in Development.**

*Support of Education.* Jackson Energy offers speakers and presentations to interested school and civic groups. These subjects include electrical safety to energy efficiency and other topics as they relate to the cooperative.

The electric cooperative also supports education through its scholarship programs. This includes a \$3,500 scholarship to the Somerset Community College Lineman Training Center, as well as an essay scholarship program that awards eight \$2,000 scholarships to “outstanding students in [its] service territory (jacksonenergy.com, 2016).”

Jackson Energy also sends four students from its service territory on the Kentucky Rural Electric Washington Youth Tour, the annual, week long, all-expenses-paid trip to Washington, DC, that is open to select high school students whose homes are served by electric cooperatives.

*Support of Employee Civic Activities.* Territories and challenges may differ vastly, but Jackson Energy experiences many of the same constraints as Owen Electric, and presumably, other electric cooperatives across the state when it comes to maintaining its core business while still supporting outside development ventures.

Jackson Energy must also manage limited resources; limited links; minimal incentive to participate and engage; or the inability to identify a useful role within an initiative as facets which might hinder its participation in an area development project on a corporate level.

Jackson Energy circumvents this issue just as Owen Electric does. It encourages and supports its employees to participate in their local civic organizations.

Again, though the participation of employees in civic activities in their personal time may not be participated in as a formal representation of Jackson Energy, the support employees receive to become and remain involved can be perceived as another way the electric cooperative supports the movement and growth of the communities it serves through social empowerment (Barkley et al., 2004).

### **East Kentucky Power Cooperative’s Support of Member Cooperative Economic Development**

East Kentucky Power Cooperative is the generation and transmission (G&T) cooperative owned by 16 electric distribution ‘member’ cooperatives—often referred to as ‘owner-members’—in Kentucky, including Owen Electric and Jackson Energy.

East Kentucky Power and its owner-members are a unique system but one that truly exhibits ‘cooperation’ in motion. East Kentucky Power’s most visible role is providing power to the cooperatives that own it. But aside from generating electricity to the cooperatives that own it, East Kentucky Power houses several other departments that not only support the operational needs of the G&T, but act as support to its owner-member cooperatives when necessary; this includes its economic development department and its staff.

The economic development team at East Kentucky Power is particularly supportive in its ability to focus on top-level, statewide issues and interact with state government cabinets and professional organizations like the Cabinet for Economic Development and the Kentucky Association for Economic Development.

**Defining Economic Development.** According to East Kentucky Power, economic development is defined as “any and everything that helps bring a community together for an opportunity to improve the economic and social standing of the citizens.”

**Measuring the Success of Economic Development Support.** East Kentucky Power reiterates that economic development measurements are difficult and tend to be more qualitative than quantitative. For East Kentucky Power, one way of measurement is being present on behalf of a member cooperative, like Owen Electric or Jackson Energy, when the opportunity arises to ‘pitch’ their communities to prospective industries.

Another measurement of success comes from the level of involvement East Kentucky Power attains while working alongside state cabinets and professional economic development organizations on statewide projects.

### **Resources Allocated to Economic Development Efforts.**

*Website and Mobile Application Development.* Aside from the devotion of staff members, time and a monetary budget for seeing through economic development promotion and projects, the most tangible recent products East Kentucky Power has contributed recently include the web sites and mobile apps developed to canvas the state electric cooperative-service territories and provide the statistics and information that site selectors for large industries find critical to their decision making process.

Dataispower.org is the economic development web site that serves as a landing page to the online economic development tools developed by the G&T’s team; it touts the East Kentucky Power system of owner-members, including Owen Electric and Jackson Energy, and promotes its commitment to the development and betterment of the areas those cooperatives serve throughout 87 of Kentucky’s counties. The site provides direct contact information to economic development staff at East Kentucky Power Cooperative.

Links to PowerMap and State Book International are available using their respective links from the dataispower.org page or as stand-alone web addresses to type in or via web search. PowerMap uses a device’s GPS capabilities to determine the user’s location and pin point exactly what electric cooperative service territory a user is in, if at all.

According to its website, PowerMap “leverages over 63,000 site selection data points from StateBook International...to access geo-specific data” for that particular community or region served by an electric cooperative. A PowerMap user can connect directly to the StateBook website for additional information.



The StateBook International website, most commonly referred to as simply 'StateBook,' is the product of four years of intensive research and design in collaboration with economic development organizers, site selectors, universities, and government agencies. Statebook.com touts itself to be "the first online marketplace for economic development and corporate site selection." It uses the 63,000 data points referenced earlier from 50 sources and seeks to help vested industries looking for demographic and economic data perform those tasks more efficiently, providing the desired data online instantly and specific to the geographic area of interest.

**Presence and Promotion via State Economic Development Initiatives.** Where the abilities of Owen Electric and Jackson Energy's staff may be limited in regard to the time they may spend traveling and devoting efforts outside of their immediate service territory, East Kentucky Power's staff has more flexibility.

Their economic development team has positioned itself to complement the efforts of the local electric cooperatives and act as a liaison and representative of sorts between those cooperatives and larger state departments, organizations and initiatives.

East Kentucky Power said it helps "tell the story" of electric cooperative communities and work to make sure communities are positioning themselves in a positive light to recruit or retain businesses. This is attained through advertising and marketing; seeking grants and money to implement educational and workforce skills development programs; and the development of the web site and mobile tools mentioned earlier.

The G&T's economic development staff's efforts to formidably align itself with state economic development entities and organizations, presents itself as a 'chicken or the egg' concept. Is additional, valuable promotion on behalf of Owen Electric and Jackson Energy is a function of networking? Or is a valuable network a function of the self-promotion East Kentucky Power has forged. Regardless, it appears to work, complement, and build on the strong local roots Owen Electric and Jackson Energy have established.

**Brokering Working Relationships to Bridge Social Capital.** Ever present in the cooperative-gearred routes to development are the fundamentals for successfully fostering economic and social growth in a community. As the relationship exists currently, Owen Electric and Jackson Energy are able to afford the majority of their time and efforts on cultivating a presence and relationship within their respective territories and affiliated regional economic development organizations.

The East Kentucky Power economic development staff's liberal ability to move fluidly and in concert with trending issues to network across county, territorial, or state lines is a tremendous advantage for Owen Electric and Jackson Energy. Their work begins to broker, grow and maintain the larger, outside relationships—or social capital—that need to be forged in order for successful economic and social development to take place in the northern and southeastern Kentucky areas defined within the scope of this project.

Owen Electric, Jackson Energy, and the other 14 owner-member cooperatives of East Kentucky Power are able to work through the G&T to work alongside the state economic development cabinet and local economic development groups to identify and promote industrial sites available for development within the respective service territory.

Both Owen Electric and Jackson Energy have a web site in conjunction with East Kentucky Power promoting specific sites that are available. In addition, the G&T assisted in developing a video with each electric cooperative promoting northern Kentucky as a great place to “build a business and build a life.”

Owen Electric specifically noted this networking with the aforementioned electric cooperative system saying that it's “like a big family—it's a very close and open system. We collaborate on major initiatives, share best practices, and exchange ideas...the best way to achieve economic vibrancy is to investigate what has worked best for similar cooperatives and similar communities.”

The importance of transcending preexisting boundaries in cooperative development theory is further exemplified as East Kentucky Power Cooperative specifically identifies their elimination and the importance of pooling regional and statewide resources as critical to the success of their economic development endeavors thus far.

Our owner-members are ‘of the community’ and that helps tremendously having the pulse of the local economy. We view our owner-members as the hub for information with regard to getting information in the hands of businesses and residents regardless of county lines. The co-op territory of our owner-member transcends geographic boundaries and truly brings the opportunity of ‘regionalism’ to reality. We are working with our owner-members to provide educational opportunities for their territories with export; government procurement; state and local incentives; etc.” (EKPC, key informant interview, January, 2016).

Aside from a seamless working relationship with both electric cooperatives, East Kentucky Power acknowledges the headway being made to shed boundaries and pool resources in Jackson Energy’s territory.

“Out of necessity, there’s a forced unity in eastern Kentucky to look for alternatives to coal. City and county lines are coming down because they have to. There’s no more, ‘[the coal industry] will get better and come back.’ Out of necessity, people are eager and working together.” (EKPC, key informant interview, January, 2016)

### **The Electric Cooperative as a Member of its Community**

Both Owen Electric and Jackson Energy draw on their long-standing presence within the territories and communities they serve as the primary source of support behind the vested interest and expertise each contributes to local economic and social growth.

It is easier to accomplish things if you are a part of the community than if you are an outsider. I have seen this work time and time again that if the local co-op asks local leaders for something to be done, that a majority of the time what is needed is done. ‘Local roots’ are the key to cooperative and why some communities can get [economic development] projects and some can’t. I believe communities that have everyone working together for a common good are much more successful...Our local co-ops are instrumental in working on behalf of the betterment of the community as a whole than the larger cities and multi-state utility providers.” (EKPC, key informant interview, January, 2016).

Jackson Energy key informants stated that by being local, its staff is better able to understand the issues, problems and the history of its local communities. They know who will work well together and who would not be a good partner for a particular initiative. Jackson Energy is confident in its ability to put together effective collaborative teams and include business and government leaders to move a project forward.

Owen Electric key informants also noted its ability to mobilize effective action teams for important initiatives due to the “strong relationships” it has built and maintained with state and local officials—including senators, representatives, judge-executives, and mayors—and other community and business leaders.

As an organization with a “proven track record of more than 75 years of accomplishing major projects,” Owen Electric touts itself as “uniquely positioned to assist with major initiatives,” noting the fact that electric cooperatives employ people with an expertise in engineering, finance, etc. as a function of its core business; that expertise may be utilized to facilitate major undertakings in the pursuit of economic and social growth.

**Owen Electric Cooperative.** Owen Electric is viewed as a great contributor to the communities it serves. First and foremost it is a local business that provides jobs in the area.

As discussed previously, Owen Electric reinvests in communities within its service territory through its scholarship program. The electric cooperative regularly provides speakers to civic groups and events, as well as opens its doors to school and community groups for tours and presentations. Because of the encouragement it gives its employees to participate local activities outside business hours, Owen Electric’s visibility extends further into the territory it serves.

The cooperative and employees are seen as active and engaged leaders in the community. Our employees volunteer and invest themselves into their communities through numerous organizations and a wide variety of charitable causes. Involvement ranges from youth sports activities, churches, Relay for Life events, chambers of commerce, industrial authorities, and economic development organizations. Financially we support many worthwhile causes, from lighting at the [Owen County] high school football field to tornado sirens to keep people safe in southern Kenton County.” (OEC, key informant interview, January, 2016).

Because of this multi-level involvement, Owen Electric’s perception has been that its function is to serve the community. By utilizing the support East Kentucky Power provides and exercising relationships with regional organizations with mutual economic development interests, the Owen Electric has seen progressive improvement in the ability to help small commercial members while still devoting time to actively recruit new life blood by way of outside, industrial and commercial members.

Touting the fact its member-owned has actually been believed an advantage by Owen Electric when talking with industrial members, saying that “being driven by what’s best for the member lends credibility.”

It is important to reiterate that industrial and commercial businesses which elect to move into Owen Electric territory are considered members as well; therefore, the cooperative has an implied obligation to act in the best interest of the businesses it serves as well.

**Jackson Energy Cooperative.** According to key informant interviews, Jackson Energy enjoys a positive perception within the communities it serves. The electric cooperative contributes fundamentally as a viable business and employer of the local workforce.

In addition, Jackson Energy contributes to local community projects not only monetarily through donations and sponsorships, but by encouraging employees to volunteer their time to local civic clubs and non-profit organizations. Jackson Energy sees this as a way to appear “accessible and as an active part of the communities they serve.”

The electric cooperative pays the dues of its employees who join civic clubs and regularly contributes to local little leagues, sports leagues, community fundraisers, school programs and athletic programs. As discussed previously, Jackson Energy reinvests in its communities through its scholarship program and speaking opportunities with local school and civic groups.

Jackson Energy makes it a point to meet regularly with local development groups and government leaders on economic development topics. It provides support to local commercial businesses by providing technical information and programs Jackson Energy provides specifically for them.

### **Perception of the Cooperative by Affiliated Economic Development Organizations**

“Leadership” is the overriding theme in the perception local economic development organizations interviewed hold of Owen Electric and Jackson Energy.

The leadership of the electric cooperatives is noted by their corporate presence and visibility through their activity in local chambers of commerce specifically, civic groups and through their involvement in community events.

In that Owen Electric and Jackson Energy are electric distribution cooperatives, their core business and industry position them to be a formidable leader within the community. Supporting traits identified by other local economic development organizations include electric cooperatives’ the ability to offer incentive programs and craft attractive utility rates to recruit or retain industrial and commercial businesses; the ability to offer USDA Rural Utility loans to recruit industrial and commercial businesses; and the cooperatives’ employment of economic development staff.

Considering those same traits, the term “hostess” was applied to the cooperative by a key informant. In so much as the cooperatives can somewhat conform to the needs of large industries by offer special utility rates, loans, and in-house economic development and technical expertise, Owen Electric and Jackson Energy position themselves as “one of many hostesses” responsible for making large industry “feel welcome.”

By being perceived as both a “leader” and “hostess” in the communities they serve, there were several underlying tones implied regarding the responsibility Owen Electric and Jackson Energy have to their communities. While there doesn’t appear to be a lack of trust with regard to the intent of the electric cooperatives, interviewed local economic development organizations expressed the expectation that the co-ops exercise their ability to be flexible enough in incentive and monetary offerings to prospective industries in the interest of the overall good of the communities that stand to be impacted. A key informant also said it was important for the cooperative to remember that “as goes the community, so goes the cooperative.”

Another facet of the perception held by local affiliated economic development groups is that Owen Electric and Jackson Energy are a great source of higher level networking and contacts—particularly those exercised by East Kentucky Power’s statewide work with government economic development cabinets and other large entities. Once again, the electric cooperatives’ ability to draw upon the tools and resources to bridge social capital comes to light.

“Cooperatives touch every single person in the community. If they choose to lead, they could be the glue around any common economic development goal.” (Key informant interview, January, 2016).

## **Chapter 5**

### **Discussion and Conclusions**

People who are rooted and care about their community are essentially the foundation of any viable effort toward economic and/or community development. The interest and effort must start from within; whether it is establishing an electric cooperative to bring power to the community or trying to give it the necessary push to attract new, outside economic lifeblood, there must be that common interest in the locale and wellbeing of its people. Following the research for this thesis, it has become evident that electric cooperatives in particular possess a great potential to lead and help orchestrate economic development efforts within the communities they bring power to.

#### **Application of Alternative Framework**

The alternative framework introduced by Barkley et al. (2004) meshed well as applied to the work and efforts put forth by Owen Electric and Jackson Energy cooperatives with regard to economic development within their service territories. Within the framework, cooperatives are conceptualized as “intentional” and “unintentional” in their community—or economic—development activities. From the research conducted and information garnered from key informant interviews, it can be solidly concluded that each rural electric cooperative is intentional in its economic development activities.

This is supported by Owen Electric and Jackson Energy’s employment of specialized economic development staff; their specialized rates and services designed to attract industrial and commercial members; as well as the cooperatives’ development-centric activities on local, state, and even national levels. The electric cooperatives have established strong ties with other regional organizations that are established for the purpose of economic development.



Barkley et al.'s (2004) framework also went a step further, explaining practical reasons a cooperative business may be better able to act as a catalyst for the community's development, as well as issues that might hinder. It categorizes cooperatives into three subsequent groups, as mentioned earlier; both Owen Electric and Jackson Energy fit the prescribes for an extrinsic community cooperative, one which has been created to serve the community and provide a specific good or service as determined by the social and economic needs of the community.

### **Electric Cooperatives: Leveraging Local Leadership to Address Economic Development**

In the scheme of world history, 80 years amounts to the batting of an eye; in the scheme of a rural Kentucky community, it is more than enough time for an electric cooperative like Owen Electric or Jackson Energy to have established their commitment and staying power.

So, while there is not a great span of history or quantitative data to pull from with regard to rural electric cooperatives and the roles and contributions to economic development they have and continue to give to the communities they serve, there is certainly tangible evidence of and substantiated success of the intentional programs the cooperatives have employed to further economic and social development in their respective service territories.

The tobacco buyout and the decline of the eastern Kentucky coal industry after increased government and EPA scrutiny greatly impacted the economies of the areas Owen Electric and Jackson Energy serve.

Challenges arising from significant economic events like the aforementioned spur a renewed interest and sense of urgency to rural Kentucky areas' baseline interest in economic promotion and development.

Fortunately, as East Kentucky Power said, cooperatives are "by the people, for the people," and that community focus is a boon from the standpoint of recruiting new industrial and commercial businesses, or lifeblood, for the community.

Another key informant pointed out the connection between a cooperative and the community it is rooted in, saying that “as goes the community, so goes the cooperative.” This is certainly true; while cooperatives can afford the luxury of being more altruistic in nature, what is good for the community is ultimately good for the cooperative. Therefore, the increased economic development brought into an area by new businesses or growth equals increased energy sales for Owen Electric or Jackson Energy. Taking an interest and active role in the development activities of a community is just good business sense.

As was sought to address through research, one of the foremost indicators of Owen Electric and Jackson Energy’s verdant interest in the economic development in the wake of significant changes to their local economies is the employment of staff whose role is to manage business and government relationships.

It is through the relationships developed by these electric cooperative staff members and other financially- or staff-supported endeavors that tangible changes have taken place in Owen Electric and Jackson Energy’s service territories.

Due to the inherent interest in the communities they serve, Owen Electric and Jackson Energy cooperatives have developed a good report with state economic development cabinets through local investment and promotion, and in so many words ‘earned a seat at the table’ when it comes to major decision-making and economic development activities and projects within Kentucky. The development of web sites and mobile apps like PowerMap and StateBook in conjunction with East Kentucky Power Cooperative have actually positioned Owen Electric, Jackson Energy, and other electric cooperatives within the system as setting the pace for economic development.

The relationship these electric cooperatives enjoy is unique; they are two of 16 other cooperatives that own East Kentucky Power, their G&T plant. In as such, they are ‘sister’ cooperatives and a culture of mutual respect and sharing of ideas has been expressed by each cooperative in regard to a host of issues each face, including those of rural economic development.

## **Differing Approaches in Promoting Economic Development**

While research sought to find ways Owen Electric and Jackson Energy contributed to economic development in their areas, it also sought to look at the approaches each cooperative takes with regard to their own unique set of circumstances. Though the renewed level of emphasis and the measures with which to gauge the success of the electric cooperatives' economic development activities mirror one another, the unique challenges each face in their service territory force the cooperatives to approach the overriding issue differently.

Much of Owen Electric's service territory is located in and around an area of Kentucky, called "The Golden Triangle." It's an economic region shaped between Louisville, Lexington, and northern Kentucky/Cincinnati containing most of the state's population, wealth and economic growth.

There are three interstates—71, 75, and 64—that run amidst the area and it is home to four major airports within a 100 mile radius.

The accessibility and accompanying infrastructure alone allows Owen Electric to take a more passive approach with the area's economic development efforts and relationships it maintains with its larger, existing industrial and commercial members.

Because large industrial and commercial businesses are energy-intensive and ever-competitive, electric rates and the availability of a ready workforce top priorities. Owen Electric offers a suite of special electricity rates, energy efficiency rebate programs, and expertise on industrial energy use. The northern Kentucky area boasts a workforce with a percentage of attainment of high school and advanced degrees that surpasses the state average.

The relationship Owen Electric is able to have with regional economic development organizations is one of mutual support and participation in initiatives and campaigns, rather than reliance on the part of the organization or the electric cooperative.

Jackson Energy's territory lies in southeastern Kentucky, a small portion of its far western service territory is exposed to Interstate 75 but still considered remote and located in a mountainous and rugged region of the state. There is one major airport within 100 miles, located in Lexington.

The geographic location offers no favors, nor does the accompanying lack of accessibility via airports, interstates, urban development and general infrastructure. Jackson Energy's service territory is simply not a ready-made location for a large industrial or commercial business looking to relocate or expand.

In regard to its workforce, the percentage of adults who have attained a high school education or higher fall behind state averages, lagging as much as half in regard to adults having attained a bachelor's degree or higher.

Key informants all acknowledged that while better education and STEM-gear curriculum has become a marked priority in the southeastern Kentucky area schools, just like roads and high speed infrastructure, it will take time to cultivate a ready workforce for the area.

Considering numerous, formidable challenges, the actions Jackson Energy and regional economic development organizations take must be much more aggressive and intentional. The relationships the electric cooperative maintains with other area development organizations must be one that is at the very least 'teamwork.'

More often than not, Jackson Energy was perceived by the interviewed economic development organizations as a leader. This was due to its position as an electric utility, considering the importance of electric rates to industrial and commercial businesses; it was also due to its ability to offer loans through the USDA Rural Utilities Service.

Jackson Energy also offers a host of special electricity rates, energy efficiency rebate programs, and expertise on industrial energy use for current and prospective industrial and commercial members.

East Kentucky Power attested to the efforts of the electric cooperative's economic development efforts, saying "Jackson is a good example of not messing around, trying to manipulate or hold back. It is one of the most aggressive to seat those to help a company, with an attitude of 'what can we do as a co-op to help you.'"

Networking has been a recurring theme both in cooperative development literature and throughout researching Owen Electric and Jackson Energy's efforts within the state. Outside of all that has been implied by the benefits these electric utilities provide by way of being a cooperative and investing in their communities, the strong network they bring to the table renders them an undeniable force to combat struggling rural economies in the state of Kentucky.

Bearing in mind the role the affordability and reliability of electricity plays in the industrial and commercial business world, Owen Electric and Jackson Energy serve as models of the economic development vehicle electric cooperatives can be to rural Kentucky.

### **Observations and Future Research**

In conducting interviews with key informants from both Owen Electric and Jackson Energy cooperatives and the regional economic development organizations, there was the lack of mention of small businesses and entrepreneurship. It leads to question whether there is a bias among these cooperatives and organizations in favor of large industrial and commercial businesses or if they were simply overlooked. There is also the question of retention and expansion—how is this addressed by the electric cooperatives once a business had established or relocated to their service territory?

There was also no mention of specific tax incentives stemming from local or state government, nor information given specifically about local officials and their input or actions regarding further local incentives and economic development.

In reflecting on the research conducted in this specific project, it may have proven beneficial to have asked questions that specifically asked for information regarding the aforementioned. Therefore, this may be a next step for future research stemming from this project.

### **Recommendations**

Electric cooperatives serve more than 1.5 million people in 117 of Kentucky's 120 counties—that's 35 percent of the state's population (kaec.org, 2015). Pair those numbers with the fact that it was a grassroots effort that established those cooperatives 80 years ago, and a prevalent takeaway is the tremendous potential for leveraging economic development. However, enhancing an awareness of self, so to speak, for the cooperative while promoting the cooperative difference and keeping open lines of communication are key factors to maximize the impact electric cooperatives can have when it comes to economic development.

Awareness needs to be cultivated internally in the electric cooperatives as well, asking the questions: What are we working for? Why is it important? What can we, from the standpoint of a community-centric utility, do that we're not doing already?

It is important for the people who are served by an electric cooperative to understand what it is and why it was established by their grandparents or great-grandparents. It is important for a cooperative member to understand that it is not-for-profit and while it does fill a necessity in this day and time, it operates for the good of the member.

Education and understanding yields awareness and understanding of these local boons and subsequent support for it.

Owen Electric and Jackson Energy have strong ties to their communities and with regional economic development organizations that became evident in speaking with key informants during the interviews. East Kentucky Power provides a strong presence on behalf of the cooperatives that own it on the state and national level, as well as providing support through video, website and app development. There is a strong network and electric cooperative infrastructure in place currently in Kentucky from which to build from.

Making strides toward increasing awareness and opening up communications would only further strengthen this network, giving electric cooperatives across the state a larger presence and ability to leverage critical economic development needs as dictated by the communities they serve.

## Appendix A

### Interview Questions

#### Background Information:

How long have you lived in this region/community?

How long have you worked for your organization?

As a member of the community, is there an inherent level of trust given to the electric cooperative? Why or why not?

#### Regional Challenges:

Regarding this region, what do you believe is the biggest challenge it faces in terms of economic development and sustainability?

What is the primary concern in your area, regarding the economy and its development?

In your opinion, who or what are the most influential entities to facilitate the improvement of the local/regional economy?

#### Organization-based Strategies and Solutions:

Is your position within the organization in response to economic challenges in the area?

How does your role at the organization you work for help to address that challenge, if at all?

How does your organization define “economic development?”

What kinds of measurements do you use to gauge the success of your economic development efforts?

What resources are available to you/your organization to pursue economic development initiatives?

What entities or factors influence your organization in regard to economic development projects or partnerships?

What are some ways you economically support the communities your organization is rooted in?



Local Economic Development Insight:

When you communicate with an industry looking to relocate to the area, what are their foremost concerns?

Is the electric provider one of the primary concerns?

What aspects of electric service are the most important to the industry—rates, incentives, reliability?

What tangible improvements or opportunities does an industry stand to bring into a small community? Jobs? Investment/monetary incentives through donations, taxes, etc?

Perception of the Local Electric Cooperative:

Does your local electric cooperative actively involve itself in local community involvement? In what ways?

In regard to large industry and subsequent “opportunity” moving into the area, the electric provider could be perceived as a gatekeeper. In what ways does the cooperative work with the community to build the community identity and work to access outside sources that might provide benefits for the community?

What is the biggest change you see in the electric cooperative’s function within the community?

In what other ways- perhaps not directly related to or designated as “economic development,” does the electric cooperative contribute to the community or encourage development?

Do you feel that being a cooperative gives you an advantage when working with economic development issues and initiatives? What are those advantages?

What types of advantages do an electric cooperative’s ‘local roots’ give when trying to mobilize other community organizations or individuals to achieve a common economic development goal?

There is a concept known as “bridging social capital,” which acknowledges that for communities to achieve significant improvement to the quality of life, they must seek outside networks that can offer necessary resources to do so. How can the cooperative act as a broker for this?

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