

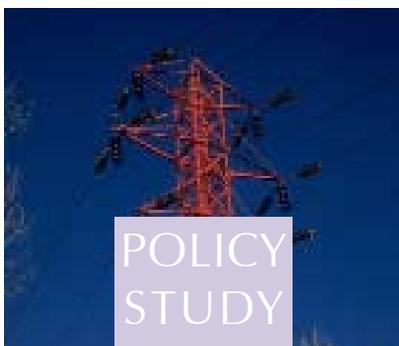
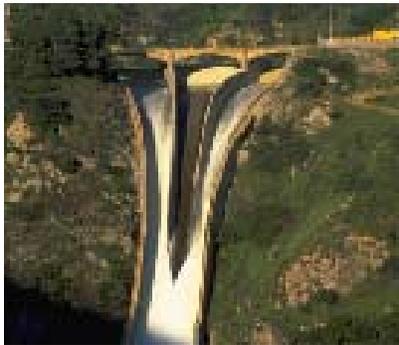


Reason

August 2002

ELECTRIC COOPERATIVES AND A CHANGING POWER INDUSTRY: HOW OUTDATED STATUTES SHORT-CIRCUIT COMPETITIVE MARKETS

By Lynne Kiesling and Terri Kandalepas



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Electric Cooperatives and a Changing Power Industry: How Outdated Statutes Short-circuit Competitive Markets

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Executive Summary

Restructuring and increasing competition in the electricity industry is a reality in over half of U.S. states and the District of Columbia. As the electricity industry becomes more competitive, competition in electric power generation will create more choices for consumers and lead to efficient production of power. To realize these benefits, though, will also involve reconsidering the tax, legal and regulatory treatment of electric cooperatives. Cooperatives are member-owned non-profit private power companies, and they enjoy the following subsidies:

- *Tax exemption.* Cooperatives are exempt from federal corporate income tax, some other federal taxes, and state and local income taxes. Investor-owned utilities are not tax exempt because of their for-profit status, but they can take advantage of investment tax credits and accelerated depreciation, while cooperatives cannot.
- *Loans.* Through the Rural Utilities Service (RUS, successor to the Rural Electrification Administration), electric cooperatives qualify for low-interest insured or guaranteed loans. These loans, in combination with the fact that they cannot pay interest to their members on their shares, mean that cooperatives have a low cost of capital relative to other utilities. These loan policies introduce distortions into commercial credit markets and are likely to decrease the productive efficiency of cooperatives, particularly generation cooperatives.
- *Federal preference power.* Cooperatives receive preferential treatment in purchasing relatively low-cost hydropower from federal generation facilities. Preference power distorts prices among regional markets, and because of taxpayer subsidies to federal generation facilities, means that some regions are receiving subsidies paid for by all taxpayers.

Cooperatives have also changed their business models as they have used these characteristics to their advantage, diversifying into such complementary businesses as natural gas, water and waste water, telecommunications, and cable and satellite television. As the country has evolved demographically, cooperatives have also found that their member base is increasingly suburban instead of rural, and that they can reach out to customers that are not their traditional members. Many cooperatives that used to serve small, rural communities now serve upscale urban developments, yet retain the preferential treatment accorded to them in return for serving small, rural communities. Thus many rural cooperatives are going commercial concerns, not lifeline service to rural areas any longer.

A timely reexamination of these factors would contribute to the growth and success of competition in the electricity industry. Integrating electric cooperatives into the restructuring industry will bring benefits to cooperative members and consumers, but the best way to ensure that those benefits occur is to create consistent tax, legal and regulatory treatment. Markets do not function well when participants play by different rules.

We make a series of policy recommendations for cooperatives to navigate the transition to a competitive electricity industry, and for all consumers to enjoy sovereignty to choose providers and services:

- Change the cooperative's tax exemption, ensuring at least that the income they earn on operations other than selling electricity to members is taxable;
- Revise the loan operations and provisions of the RUS so that the loans they make are less risky, the borrowers who are financially able transition to commercial credit, and the agency can return to its mission of improving rural electric and telephone infrastructure; and

Remove federal preference power special treatment for cooperatives, opening access to federal power for all through an auction process.

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Part 1

Introduction

The California electricity crisis and prospects of rising energy prices are prompting reevaluations of many energy policies. One set of policies that warrants careful reexamination is the tax, legal and regulatory treatment of cooperative utility companies. As a result of regulatory change, restructuring, and technological innovation, the electricity industry is currently undergoing dramatic, dynamic change and redefinition. Over half of U.S. states have initiated electricity restructuring, and, while the pace of change may be delayed by the California experience, most of the rest will probably follow over time. While most recent attention has gone to restructuring investor-owned utilities, cooperatives can play a role in a competitive electricity industry. However, the existing legal, tax and regulatory differences between cooperatives and investor-owned utilities give cooperatives subsidies that are at odds with a restructuring industry and the benefits of competition. Subsidies distort the resource allocation signals that create efficiency when pricing and investment decisions occur through markets.

To a certain extent the evolution in the electricity industry and in cooperatives mirrors larger changes in the economy over the past several decades, changes that have generated higher average incomes and significantly different population density patterns from the first half of the twentieth century. For example, many cooperatives that used to serve rural communities now find that they serve densely populated suburbs with higher average incomes than the rural populations they initially served. In the twenty-first century the electricity industry will do business very differently than it is today, and certainly differently than it did at the time of the Rural Electrification Act in 1936.

In 1998, cooperatives in the U.S. had an 8.5 percent market share as measured by revenue. Public and municipal utilities had a 13.8 percent market share, and investor-owned utilities had a 77.2 percent market share.¹ Over the 1990s, cooperatives experienced more sales revenue growth than other types of electric companies. Between 1992 and 1998 sales revenue at cooperatives grew at 4.3 percent, while IOU revenues grew at 1.9 percent and the overall U.S. electricity market's sales revenue grew at 2.4 percent.²

Electric cooperatives operate according to cooperative principles, which derive from the original Rochdale Pioneers in Victorian England. A modern summary of these principles is

- Voluntary and open membership;
- Democratic member control;
- Members economic participation;
- Autonomy and independence;
- Education, training and information;

- Cooperation among cooperatives; and
- Concern for community.³

Electric cooperatives use these as their operating principles. In his remarks to the 1999 convention of the National Rural Electric Cooperative Association (NRECA), NRECA President Glenn English said

[E]lectric cooperatives pursue a different kind of wealth: the strength that comes from people working together to help themselves. That is why the cooperative way of conducting business has been granted appropriate recognition in state and federal law. Such laws take into account that the business model we use does not center on profit. If you serve yourself, it is impossible to make a profit. The word does not rightly belong in our business vocabulary. That is what makes us very different and very special, and why the law must deal with us differently. Cooperatives do not ask to be exempted from the law, but that we be treated differently because we are different. We ask that laws and regulations be designed to allow private cooperative businesses to meet the needs of their consumer-owners in accordance with the cooperative principles.⁴

This statement is entirely in keeping with the traditional cooperative remit to provide electric power to rural communities; however, that mission is a diminishing focus of the modern cooperative.

In this dynamic environment, electric cooperatives have evolved in directions that no longer reflect the original objectives of the Rural Electrification Act. Cooperatives have been entrepreneurial in finding new business opportunities during ongoing electricity restructuring and the advent of competition in electricity (as are investor-owned utilities and other members of the supply chain that were not even envisioned in 1936). Thus cooperatives today are very different types of businesses than they were in 1936. Economic dynamism and adherence to the original principles of cooperatives are not mutually exclusive, but they do raise some public policy issues because of the differential legal, tax and regulatory treatment of cooperatives.

A. Previous Estimates of Cooperative Subsidies and Production Efficiency

The changes in the environment facing electric cooperatives, as well as the changes in their operations, have led to research into the differential treatment of electric cooperatives and IOUs in the past two decades. A 1982 Congressional Research Service study estimated the imputed effect on utility rates of the special tax and financial treatment of electric cooperatives, in response to two earlier studies that had calculated different estimates of the average subsidy amount, as shown in Table 1.

Table 1: Subsidy per consumer estimates for different types of utilities, 1981-82			
	Cooperative subsidy	IOU subsidy	Municipal subsidy
NRECA study	\$9.46	\$42.48	\$40.45
Pace study	\$40.29	\$7.24	N/A

Source: "Let's Talk Facts About Subsidies to Utilities," National Rural Electric Cooperative Association, 1981; Joe Pace, "The Subsidy (or Lack Thereof) Received by Cooperative Electric Utilities," summarized in H. Cavanaugh, "Who Gets More Aid – Privates or Co-ops?" *Electrical World*, August 1982, pp. 37-41.

Much of the difference between these figures comes from differences in the quantification of insured loans and loan guarantees to cooperatives, as well as the tax credits and accelerated depreciation for which for-

profit companies (including IOUs) are eligible while cooperatives are not. The CRS thus chose to focus on differences in rates instead of quantification of the subsidy, limiting their study to the following issues:

- ˆ Effects on IOUs of investment tax credits and accelerated depreciation;
- ˆ Effects of tax exemption on cooperatives; and
- ˆ Effects of REA insured and guaranteed loans on cooperatives.

Method of analysis	Effect of tax benefits on IOUs	Effect of tax benefits on electric cooperatives	Effect of tax benefits and loan programs on electric cooperatives
Average financial data	7% rate decrease	26% decrease in capital costs	40% rate decrease
Capital cost of new financing	7% rate decrease	22% decrease in capital costs	35% rate decrease
Net present value of capital cost over life of average utility investment	8-14% or 18-25% rate decrease, depending on assumptions	20-21% decrease in capital costs	32-34% rate decrease

Source: Investor-Owned Electric Utilities versus Rural Electric Cooperatives: A Comparison of Tax and Financial Subsidies, Congressional Research Service, November 29, 1982, pp. 4-7.

Using 1980 data on IOUs and cooperatives, the CRS found that “rural electric cooperatives currently receive larger subsidies from the Federal Government through tax-exempt status and borrowing subsidies than investor-owned electric utilities receive through the investment tax credit and accelerated depreciation.”⁵

Other analysts have also explored possible differences in productive efficiency between cooperatives and IOUs. In a 1988 study in the *Southern Economic Journal*, economists Daniel Hollas and Stanley Stansell used a sample of cooperatives, IOUs and municipal utilities to estimate profit functions. They found that in the generation sector of the electricity industry, cooperatives have higher average costs per megawatt hour generated than IOUs.⁶ In a subsequent study, economist Dan Michael Berry elaborated on this and other studies, arguing that cooperatives are less likely to achieve productive efficiency than IOUs for several reasons. Primarily because they operate at smaller scales, their management is more prone to incentive problems due to difficulties in unseating cooperative management, and monitoring problems accompanying the cooperative ownership structure, cooperatives do not benefit from mergers and takeovers that are a typical tool for cost savings in for-profit companies. Thus they tend to operate at less efficient, more costly levels.

... [I]t appears that the managers and their lobby are intent on protecting “historic territories,” not necessarily the interests of the RECs’ owners/ ratepayers ... Whether due to managerial choice or federal tax policy, resources are being misallocated if scale economies are foregone ... [A]s the REC is not bound by stockholders to earn a market-based profit rate, its management is afforded an even greater ability to shirk (or to simply manage the firm in an inefficient, if conscientious, manner) ... The cooperative framework does not provide the cost-cutting incentive to merger that is inherent in the investor-owned sector. Indeed, there is a disincentive with the RECs, as mergers often lead to managerial downsizing.⁷

Thus, characteristics of the cooperative ownership structure lead to higher production costs for both distribution and power supply cooperatives, according to Berry’s analysis.

Berry claims that although the cooperative share of the electricity industry is small, that improved production efficiency would result in substantial cost savings for both customers and taxpayers.

*REC composite annual revenues now [1991] exceed \$20 billion on \$60 billion of (book value) assets. Hence, if the power consumed by electric cooperative customers was produced more efficiently, substantial cost savings might ensue. The REC's operations are also important in that the federal government program that subsidizes these private, "nonprofit" firms now costs the taxpayers nearly \$1 billion per year. Moreover, the REC's tax-exempt status places an annual implicit cost of millions of dollars on the taxpayers in the form of foregone corporate income taxes ... it is time to seriously consider the efficacy of this aging New Deal program ...*⁸

One of his specific findings is that power supply cooperatives were actually the least efficient, a result Berry attributes to their high debt/equity ratio relative to distribution cooperatives and IOUs. As we will see later in this analysis, federally insured and guaranteed loans are the foundation of this high debt level at G&T cooperatives.

B. Focus of our Analysis

In this study we argue that much of the decades-old public policy governing electricity cooperatives has become obsolete due to changes in technology, incomes and demographics in the American economy. While cooperatives are seizing opportunities to make the most of competition, they still argue for being treated more favorably than other private companies. We focus on three particular policies: tax exemption, loan subsidies and guarantees, and preference in purchasing power from federal generators. These policies, relics of the rural electrification movement, are not suited to a competitive environment.

Although still subject to certain state revenue taxes, *electricity cooperatives are exempt from many federal and state taxes* to which for-profit businesses are subject, including investor-owned utilities. However, the economic reasons underlying those exemptions have changed.

- As cooperatives become more entrepreneurial, their business models evolve away from those that provided the original rationale for tax exemption.
- In addition, as cooperatives serve markets that are less and less rural and tend to have higher incomes (such as suburbs), taxpayers not served by cooperatives essentially subsidize the members of cooperatives as a result of this tax exemption.
- In cases where the cooperatives' markets have higher incomes relative to, for example, urban customers of investor-owned utilities, this tax exemption serves as income redistribution to higher-income individuals.

This tax exemption policy is inequitable, inefficient and distortionary, and should be revised in light of recent market and technological changes.

Electricity cooperatives can also use the Rural Utilities Service (RUS) to *borrow at interest rates below market rates*, and the RUS provides *loan guarantees* that enhance the credit ratings of cooperatives. In addition, the evolution of many cooperatives has included their not returning equity to members as they are supposed to according to cooperative principles. That equity access makes cooperative investment and expansion easier and cheaper than it is for investor-owned utilities (IOUs) and other taxable corporations.

Cooperatives (and municipal utilities) also receive *low-cost, subsidized power generated from federally-owned sources* preferentially. As in the case of tax exemption, this preference acts as a subsidy to the cooperatives' members, which is both distortionary and redistributive.

The unfortunate result of these biases is inequitable taxpayer subsidies of cooperatives and their members and customers; while all taxpayers fund these activities, only a small proportion of the U.S. population enjoys the benefits accruing to cooperatives from these biases and subsidies. This fact has become more apparent over the past three decades, during which time many observers have wondered if the Rural Electrification Administration/Rural Utilities Service has distorted economic outcomes and outlived its usefulness, and if public policy toward cooperatives should change.

Part 2

Historical Background

The turn of the century marked the beginning of electrification in the United States. Initially, the electric industry focused on bringing light into homes and businesses, but with the advent of the electric motor, progressive farmers became more interested in using electricity to help irrigate and farm their land. It soon became apparent, however, that electrification was developing unevenly, as most central station electric service provided electricity only to areas with a relatively dense population. During the time of the Great Depression, the sources of capital that had been used to fund the construction of electric utilities began to run out. In addition, due to the economic problems, farmers were in financial trouble and lacked the purchasing power to finance rural electrification. The solution seemed to be for the Federal government to step in and provide long term financing for rural electrification at lower interest rates than those that could be obtained through commercial lenders.

As part of the New Deal, President Roosevelt established the Rural Electrification Administration (REA) through Executive Order 7037 on May 11, 1935.

One of Roosevelt's principal aims was to bring electricity to rural America. Convinced that the private utilities companies would not do the job at rates country folks could afford, he concluded that the Federal government would have to lead the way. In 1935 he set up the Rural Electrification Administration as part of his relief program.⁹

The purpose of the REA was to provide loans to support the electrification of rural America, because most electric utilities only found it feasible to serve high-density areas. The statutory provision for the REA was passed in the Rural Electrification Act in 1936, and the REA became part of the United States Department of Agriculture (USDA) in 1939. The REA provided direct loans to construct and maintain electric utilities, and it also provided guarantees on loans made by other lenders. According to the Rural Electrification Act (REA Act), loans could be made, “for the purpose of financing the construction and operation of generating plants, electric transmission and distribution lines or systems for the furnishing of electric energy to persons in rural areas who are not receiving central station service...”¹⁰ Rural areas were defined as areas that did not have a population of more than 1,500 people.

REA funds were supposed to be used to bring electricity to rural areas that were not served by investor-owned utilities, so most loans were given to governmental units and cooperative associations. Farmers began to form cooperatives to distribute their own electricity in order to provide electricity to areas with low population densities, where it was not profitable for private utilities to operate:

[T]o overcome ... opposition, the [Roosevelt] Administration urged the establishment of nonprofit rural cooperatives that would borrow money from the REA to build power lines and supply cheap electricity. In

the spring of 1936, congressional leaders, rallying behind the motto “let’s electrify the country,” made REA an independent agency which would principally give loans to nonprofit organizations.”¹¹

As of April 1997, over 99 percent of the electricity loans made by the federal government were given to nonprofit cooperatives.¹² Since cooperatives initially had no means of generating their own electricity, they reached an agreement with power companies around the time of their inception to buy energy from them at standard wholesale rates, and these rates could be further discounted during the development period of the cooperatives.

Motivated by the difficulties of rural poverty in the Texas hill country, Congressman Lyndon Johnson was an avid supporter of the rural electrification mission of the REA in the 1930s and 1940s. Johnson persuaded Roosevelt to modify the population density minimum that the REA had established before granting a loan.

Roosevelt agreed to encourage the PWA [Public Works Administration] to provide the \$7.35 million [to build transmission lines from a new dam], which it did promptly, and to press Carmody [administrator of the REA] into relaxing the density requirement to Hill Country cooperatives.”¹³

Johnson spent much of 1938 working to encourage farmers to join cooperatives (and persuading municipalities to establish public power companies). By 1939 hill country farms had access to cheap electricity through Johnson’s efforts, from which Johnson earned a longer-run political benefit; “... the dams and rural electrification gave him a record of accomplishment which was invaluable in his political campaigns.”¹⁴

Before 1944, electricity loans granted by the REA were made at interest rates that fluctuated with the government’s cost of money. In 1944, Congress instituted a fixed interest rate of 2 percent, which was the cost of money to the government at that time. However, as interest rates grew over time, the government was faced with subsidizing more of the cost of REA loans. In 1973, The RE Act was amended to establish the Rural Electrification and Telephone Revolving Fund (RETRF) for the purpose of making loans to REA borrowers. The amendment increased the interest rate on loans made from the RETRF to a standard rate of 5 percent, and it also enabled the REA to guarantee loans made by other lenders.

One change in the 1973 Act was designed to increase the financial self-sufficiency of distribution cooperatives, with the REA making insured loans at a standard interest rate that does not cover 100 percent of the financing of a long-term project.

The 1973 amendments authorized an insured loan program under which loans could be made at a standard interest rate of 5 percent or a special interest rate of 2 percent ... The borrower must obtain the balance of its loan needs from other lenders. REA usually bases the proportion of loan funds it will provide on the system’s plant revenue ratio – a ratio relating the cost of a system’s plant to its revenues.”¹⁵

The requirement to obtain financing through retail credit markets was intended to increase the financial self-sufficiency of distribution cooperatives. The REA was also authorized to guarantee non-REA loans made to electric cooperatives. However, “the law also provided that REA loans would be excluded from the Federal budget.”¹⁶ Thus while taxpayer-generated revenues and government debt finance the loans that the REA makes to borrowers, that expenditure is not considered a part of the budget, and is thus not weighed against the other possible uses of taxpayer money to determine cost-effectiveness, equity or efficiency.

Another change occurred in 1994, when the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 established the Rural Utilities Service (RUS). The RUS administers the electricity loan programs that the REA had previously managed. The RUS provides two types of direct loans: hardship rate loans and municipal rate loans. In order to qualify for a hardship rate loan, a borrower's customers must have below average income per capita or a lower than average median household income, and they must have a fairly high cost for providing service to their customers. As of 1998, hardship rate loans had a 5 percent interest rate. Municipal rate loans are granted to applicants who qualify for loans but who do not meet the criteria to be eligible for hardship rate loans. The interest rate on these loans is tied to an index of municipal bond rates. In addition, the Treasury's Federal Financing Bank (FFB) has made all of the electricity loans that the RUS has issued repayment guarantees on in recent times. The interest rate on these loans is equal to the cost of money to the Treasury plus one-eighth of 1 percent. The FFB typically has lower interest rates than those offered by commercial lenders.

In addition to being eligible to receive loans and guarantees on loans from the RUS at lower interest rates, electric cooperatives are exempt from Federal income taxes under section 501(c)(12) of the Internal Revenue Code, which offers tax-exempt status to cooperative companies that derive most of their income from their members. The main criterion for receiving tax exempt status requires that a cooperative collect 85 percent or more of its revenue from its members in order to meet its losses and expenses. This statute is very broad, however, and it has not been revised since the 1920s. Furthermore, the statute exempts all electric cooperatives from taxation, regardless of any changes in their activities, size, market, or financial standing.

Since the establishment of the RE Act and the Internal Revenue Code, rural life in America and electric cooperatives have changed significantly. Initially, cooperatives were very small associations that lacked financial resources, and they purchased and distributed electricity to their members in sparsely populated regions. Before the passage of the RE Act, they were limited by the prohibitive costs associated with building electrical lines and facilities. With the infusion of capital by the federal government, by 1950 almost 1,000 electric cooperatives had received loans from the REA.¹⁷ The 1950s were a time of rural development, and consequently electric cooperatives experienced a rapid growth in demand for electricity. Furthermore, between 1960 and 1981, the sales of electricity by cooperatives increased from 25.4 million to 186.5 million megawatt-hours, which represents an average annual growth rate for REA funded borrowers that was 50 percent higher than that of the overall electric utility industry.¹⁸ By 1965, 98 percent of farms in the United States had electric service, 51 percent of which received their electricity from cooperatives.¹⁹ It seemed that much of the original purpose of the REA had been achieved. Moreover, in 1949 "the REA was given authority to make loans to extend and improve telephone service in rural areas. At that time, approximately 36 percent of the nation's farms had telephone service, most of which was outdated. Today, virtually all farms have telephone service."²⁰ The expansion of highway networks and widespread automobile ownership have also reduced the isolation of many rural communities.

As electricity service became more evenly distributed, the REA began making loans to generation and transmission cooperatives. These cooperatives generate and sell electricity to their members, which are distribution cooperatives. The original criteria for loans to generation and transmission cooperatives specified that loans could be made only under two conditions: when no other sufficient source of power is available in the region, or when the rates of the available power sources would cause the consumers to pay more for power than they would if they purchased power from facilities funded by the REA. In 1961, a third criterion was added, which said a loan could be made to a generation and transmission cooperative if it is necessary to "protect the security and effectiveness of REA-financed systems."²¹ Whereas few loans to generation and transmission cooperatives could be justified under the first two criteria, the vagueness of the

third criterion made it easier to fund the construction of power plants and that are exempt from federal income taxes with loans from the federal government that charged lower interest rates. By 1981, cooperatives were generating approximately 77.2 million megawatt-hours of electricity, which was the equivalent of about 52 percent of their total requirements.²² This expansion represents a movement towards the vertical integration of electric cooperatives, and it indicates that cooperatives has deviated from their original purpose of reliably distributing electricity in rural areas with a low population density.

Besides expanding from simply distributing electricity in rural areas to building generation and transmission cooperatives, many cooperatives also are providing electric service to areas which exceed the population threshold for rural areas. According to the GAO, the RUS requires that cooperatives must establish that they serve rural areas before they receive their first loan. Currently, the population maximum is 2,500 people. If a cooperative applies for a subsequent loan, however, it does not have to prove that it meets the test of serving a rural area again. Consequently, if the population of an area has grown and exceeds 2,500, a cooperative can still borrow funds from the RUS to provide electric service to that area. For instance, in one case, an electricity distribution borrower received its first loan from the RUS in 1945, and in 1996, it received another loan, but by 1995, this borrower was already serving approximately 140,000 customers, none of which lived in areas that were classified as completely rural.²³

Part 3

Business Models Of Cooperatives Have Evolved

In the 1930s, the large scale of central electricity generation meant that serving rural customers was not yet particularly profitable at prices those customers were willing to pay. The combination of the RE Act and the cooperative ethos electrified rural communities over the past sixty-five years. Thus “the landscape of rural America has changed as well. Where the original program served mainly farmsteads, today’s rural electric cooperative program serves essentially every type of commercial and business enterprise imaginable as well as suburban subdivisions and entire communities.”²⁴ Today, 870 distribution cooperatives and 60 G&T cooperatives serve 34 million consumers, about 11 percent of the U.S. population, in 46 states.²⁵ From 1992 to 1999, the market share (measured by revenue) that cooperatives serve in the U.S. increased from 7.7 percent to 8.9 percent.²⁶ Over the same time period, cooperatives enjoyed an annual average growth rate of 4.3 percent, substantially higher than the IOU growth rate (1.9 percent) and the overall growth rate of the U.S. market (2.4 percent).²⁷

Although the goal of rural electrification was substantially achieved by the 1960s, cooperatives have been entrepreneurial in finding ways to change their business model to bring a variety of services and new technologies to rural customers. These services include other energy services, water infrastructure, cable and satellite television and security, and fiber optic and wireless telecommunications. As Gene Argo, Midwest Energy’s president and general manager, said in 1999, “Just because you’re an electric cooperative doesn’t mean you’re restricted from doing other things, and what you are today doesn’t necessarily mean that’s what you’re going to be tomorrow.”²⁸

Electric cooperatives have also formed pools and other affiliations (or servcos) to streamline many of their processes, including marketing, generation and transmission. Touchstone Energy is a nationwide example of a cooperative alliance. Formed in 1998, Touchstone is an affiliation of 550 local cooperative electric utilities in 38 states serving 16 million customers.²⁹ One of the largest benefits of the Touchstone network for cooperatives is branding and marketing. Cooperatives co-brand with Touchstone and can use their leverage to advertise more cost effectively and to increase the national profile of electric cooperatives. Touchstone also intends to act as an information network, communicating best business practices among its cooperative member systems.

From a power supply perspective, Pacific N. W. Generating Co-op (PNGC Power) is a G&T cooperative with 15 distribution cooperative members. Such affiliations abound across the country, enabling “the G&T to maintain access to wholesale markets and to tailor products to meet retail customer needs.” The PNGC

Power network also gives the distribution cooperative member systems access to a share of output from Bonneville Power Administration.³⁰

One such affiliation for providing propane and fuel oil in Pennsylvania, Maryland and Virginia is Mid-Atlantic Co-op Services (MACS). MACS is a regional marketing consortium of Adams Electric Co-op in Pennsylvania, Choptank Electric Co-op in Maryland, and Southern Maryland Electric Co-op in Maryland. “MACS will provide the Maryland cooperatives with new competitive options for the deregulated marketplace. At the same time, it allows Adams Electric to reduce its financial exposure, open up new markets and obtain new capital.”³¹

The National Rural Telecommunications Cooperative (NRTC) is an example of a telecommunications cooperative alliance. The NRTC was formed in 1986 to bring satellite television to areas where cable television was not profitable. The NRTC now helps cooperatives provide internet and wireless communications services. For most rural customers, where cables and wires are likely to take a long time to expand, NRTC is negotiating on behalf of its member cooperatives for two-way, broadband satellite internet connections.³²

Many of these alliances also facilitate cooperative diversification,

*Cooperative ConNEXTions, in Westminster, Colorado, comprises 153 distribution systems and 12 G&Ts with four million customers in 15 states. EnPower, in Maple Grove, Minnesota, counts 92 co-ops and seven G&Ts as members. Combined they have three million customers in eight states. These two large servcos help their members diversify into propane, as well as into surge suppression, consolidated billing, warranty programs, and security and other services.*³³

As Donald Van Deest of Central Wisconsin Electric noted, “our core margins will come from diversification. Co-op managers and boards have to act, not react.”³⁴ Other such servcos include En Power, TSE and Sierra Southwest.

Cooperatives have also diversified their target markets, expanding to serve customers that are not cooperative members. For example, Northern Virginia Electric Cooperative serves a part of the Washington, DC metropolitan area that has been urbanizing rapidly over the past decade. “In 1997, the cooperative invested \$100,000 in a marketing subsidiary and began selling two big companies’ satellite-TV dishes to northern Virginia and Washington residents.”³⁵ Some observers, including former Department of Agriculture Inspector General Roger Viadero, believe that spending that money on services for rural Americans would be more consistent with the mission of electric cooperatives and the RUS. In fact, an audit of RUS borrowers to see how they invested their funds showed that

*hundreds of electricity cooperatives with low-interest government loans had nearly \$11 billion of outside investments during 1997 ... But only 61 million, or about 0.5%, went into local-business ventures or rural infrastructure.*³⁶

This result indicates that cooperatives business activities have extended beyond their original mission and beyond their members and owners. Indeed, their business models and new customer outreach make them look and operate increasingly like IOUs.

One lingering feature of the RE Act is that once a community is deemed REA-eligible, it retains that eligibility even if the demographics of the area change. Thus

[O]nce a system has qualified as a borrower – say, in the late 1930s – it remains eligible for REA subsidized loans to this day, even though the demographics of the service area may have changed drastically in the intervening years. Critics note that several REA-eligible areas that were once rural are now suburban communities or even high-priced tourist resorts; frequently mentioned locales include Manassas, Virginia, Aspen, Colorado and Hilton Head, South Carolina. The population of rural service areas has grown as well as shifted; industry sources have estimated that by the turn of the century, about 50 electric borrowers will have a quarter million or more residents.³⁷

A 1998 GAO study found that most borrowers between 1994 and 1997 served communities of 5,001 to 25,000 customers, and some loans did go to cooperatives with more than 100,000 customers.

For example, an electricity distribution borrower that first received a loan in 1945 received another loan in 1996; in the year prior to receiving this recent loan, the borrower had almost 140,000 customers ... None of these counties was classified as completely rural by USDA's Economic Research Service – all contained an urban population that exceeded 2,500. Furthermore, two of the counties were within a metropolitan area having a population of at least 1 million.³⁸

Only 26 electricity borrowers (6%) between 1994 and 1997 served 2,500 or fewer customers, which is the current population threshold for being considered a rural community. For example, Oglethorpe Power is a G&T cooperative in Atlanta that had \$5.1 billion in assets and \$399 million of outside investments in 1997. It supplies power to distribution cooperatives, many of which serve Atlanta suburbs.³⁹ Metropolitan statistical areas with a population greater than one million that are served by rural electric cooperatives include

- Northern New Jersey – New York – Long Island
- Philadelphia – Wilmington
- Pittsburgh
- Washington – Baltimore
- Atlanta
- Detroit – Ann Arbor – Flint
- St. Louis
- Dallas – Ft. Worth⁴⁰

Even if a cooperative no longer borrows funds from the RUS, its cooperative status continues to qualify it for tax exemption and federal preference power purchases. These characteristics decrease the operating costs and capital costs of the cooperative, even if the area in which it is located is a resort area or has a high average household income. As Table 3 indicates, several cooperatives serve resort areas where median household incomes are relatively high, particularly in comparison to cities, which are typically not served by rural electric cooperatives. While these data are not exhaustive or necessarily representative of all cooperatives, they suggest that cooperatives in some areas serve populations that have relatively high incomes, while IOU customers (and municipal customers, in the case of Los Angeles) in cities pay more for electricity and have relatively lower incomes.

Table 3: Rates, Incomes and Poverty in Selected Cooperative Service Territories and U.S. Cities					
State	City or Resort	Electric Cooperative	Residential Rate (cents/kWh)	Median Income	Poverty
CO	Vail	Holy Cross Energy	7.10	\$ 50,000	4.3%
CO	Crested Butte	Gunnison County Electric	7.75	\$ 32,300	11.8%
CO	Aspen	Holy Cross Energy	7.10	\$ 52,744	5.2%
CO	Durango/Purgatory	La Plata Electric	8.09	\$ 36,822	11.5%
CO	Steamboat Springs	Yampa Valley Electric	7.17	\$ 42,799	6.8%
SC	Hilton Head Island	Palmetto	6.74	\$ 38,867	13.0%
SC	Kiawah, Seabrook Islands	Berkeley	7.74	\$ 35,150	16.8%
VA	Manassas, Potomac Mills	Northern Virginia Electric	8.84	\$ 59,080	6.4%
	<i>Average</i>		<i>7.57</i>	<i>\$ 43,470</i>	<i>9.5%</i>
State	City	Electric Provider	Residential Rate (cents/kWh)	Median Income	Poverty
CA	Los Angeles	LADWP (Municipal)	11.14	\$ 35,616	16.4%
CA	San Francisco	Pacific Gas & Electric	10.72	\$ 43,405	12.6%
CO	Denver	Public Service Company	7.51	\$ 36,441	20.5%
DC	Washington	Potomac Electric Power	8.00	\$ 34,980	19.3%
IL	Chicago	Commonwealth Edison	9.30	\$ 40,181	14.0%
MA	Boston	Boston Edison	11.82	\$ 36,260	20.7%
MI	Detroit	Detroit Edison	9.25	\$ 35,357	18.0%
NY	New York	Consolidated Edison	15.87	\$ 24,031	30.2%
PA	Philadelphia	PECO Energy	11.31	\$ 28,897	21.7%
	<i>Average</i>		<i>10.55</i>	<i>\$ 35,019</i>	<i>19.3%</i>

Source: County-level 2000 data on median household income, percent of population living below the poverty line from U.S. Bureau of the Census, at quickfacts.census.gov; average residential electricity rate by company service territory, from U.S. Department of Energy, Energy Information Administration, at www.eia.doe.gov/cneaf/electricity/esr/esrt14p4.html and onward, Table 14, "Class of Ownership, Number of Ultimate Consumers, Revenue, Sales, and Average Revenue per Kilowatt Hour for the Residential Sector by State and Utility, 1999." **Note:** The City of Aspen and City of Manassas are served by municipal utilities, while the outlying areas of the county are served by cooperatives.

Thus in some cases the persistence of subsidies to cooperatives redistribute income from low-income communities to higher-income communities, because the regulatory treatment of cooperatives has not evolved as the communities they serve have changed.

Over the past decades, electric cooperatives have gone well beyond their original mission of rural electrification, and the RUS has encouraged this mission shift to more general infrastructure issues. Cooperatives have also started competing with for-profit private companies in commercial ventures unrelated to the provision of electricity. While this innovation and entrepreneurship is good for the cooperatives' customers, we must consider whether continuing to subsidize these increasingly commercial operations is a cost-effective use of taxpayer money.

Part 4

Differential Tax Treatment Of Cooperatives

Electric cooperatives are considered tax-exempt nonprofit organizations under Internal Revenue Code 501(c)(12). Cooperatives were granted tax-exempt status in 1923 because of their non-profit mission to provide electricity to sparsely populated rural areas, although this exemption was little used until the Rural Electrification Act in 1936 offered loans for rural electrification.⁴¹ The Revenue Act of 1924 amended the Revenue Act of 1916 so that electric cooperatives still qualified for tax exemption if they received at least 85 percent of their revenue from their members. Electric cooperatives are exempt from corporate income tax, other federal taxes, and state and local income taxes.

This tax treatment of electric cooperatives persists, even though the Revenue Act of 1969 implemented an income tax on income other than that derived from members, because to be taxable the cooperative has to derive the income from an activity that is not directly related to the its tax-exempt activities. Thus electric cooperatives can include income from renting poles to cable television and other utility companies, for example, toward their 85 percent threshold, because the poles are substantially related to their tax-exempt business. Examples of sources of nonmember income are sales of electricity and related services to nonmembers and the rental of property for uses other than sales of electricity to members.

Tax exemption affects cooperative utilities in several ways. First, gross income from serving members is tax-free income. In addition, the 85 percent rule enables cooperatives to earn 15 percent of their income from serving non-members, yet not pay taxes on that income. Because of the existence of economies of scale and scope in electricity generation, transmission and distribution, these nonmember activities can actually decrease the average cost of providing electricity to members, thereby increasing the apparent income from serving members and making it easier to achieve the 85 percent member income threshold for tax exemption. Finally, tax exemption enables cooperatives to use the patronage capital of their members instead of going to equity markets to raise capital to fund their operations. Because they are not required to pay market-based returns to their members, and are actually prohibited from paying interest to members on patronage capital, they have had access to a potentially large pool of inexpensive capital.

In calendar year 1978, for example, electric cooperatives reporting to REA retained 86 percent of their year-end margins, whereas IOUs reporting to the Federal Energy Regulatory Commission were able to retain 21 percent of after-tax earnings.⁴²

This degree of retention makes investment and expansion substantially less expensive for cooperatives than for IOUs and taxable corporations in other industries, because their cost of capital is substantially lower.

The operations of most electric cooperatives have changed substantially since they were first granted tax-exempt status almost 70 years ago. As mentioned above, many cooperatives now serve areas with more customers than envisioned in the original rural mission of the cooperative movement. Most cooperatives are medium-sized utilities, and resemble investor-owned utilities much more than they did in the 1930s. These changes, however, have not translated into changes in the tax treatment of cooperatives.

*As a result of these changes, the nature of current electric cooperative operations is diverse. Yet, unlike other assistance programs, tax exemption presently applies to all electric cooperatives regardless of differences in their operations, financial condition, size, or type of customers served, provided they meet the broad statutory requirement of the law.*⁴³

Finding that “tax exemption provides an indirect tax subsidy to electric cooperatives and their members,” this 1983 GAO study recommended several alternative tax treatments that would reflect the changes in the operations of most electric cooperatives.⁴⁴ One option that the GAO recommended was to treat only the income from the sale of electricity to members as non-taxable. Updating this recommendation to consider whether or not any telecommunications or water income from members should be non-taxable would be a valuable activity.

A recent report by Putnam, Hayes and Bartlett (PHB) attempted to quantify the magnitude of effective subsidy that cooperatives receive due to their tax-exempt status. PHB estimated the amount of taxes that cooperatives would have had to pay if they were not tax exempt, and their entire income was subject to taxation regardless of the share received from members. They correctly recognized that IOUs and other taxable corporations do receive some tax deductions, such as investment tax credits and accelerated depreciation of property, plant and equipment; cooperatives do not benefit from those tax deductions because they are tax exempt. Thus the PHB analysis estimates the *net* subsidy that cooperatives receive relative to IOUs and other taxable corporations, calculating an estimate of the taxes that cooperatives would pay if they were treated precisely like a taxable corporation in both tax payments and deductions. Table 4 below presents their estimates for 1992 and 1995.

Table 4: Estimates of Net Effective Annual Subsidy to Cooperatives Due to Federal, State and Local Tax Exemption (millions of 1995 dollars)

	1995	1992
Net effective annual tax subsidy to cooperatives	\$2,541	\$2,311
Percent change, 1992-1995	10.0%	

*Source: Subsidies and Unfair Competitive Advantages Available to Cooperative Utilities, Putnam, Hayes and Bartlett (1998), p. 30 (1995 data); Joseph Graves, “The \$8.4 Billion Drain,” *Electric Perspectives* 20 (May/June 1995), pp. 18-20 (1992 data). GDP deflator used at www.jsc.nasa.gov/bu2/inflateGDP.html.*

This estimate provides an upper bound on the effective subsidy that cooperatives receive due to tax exemption, because its benchmark is having 100 percent of cooperatives’ income being taxable. If, for example, cooperatives were released from the 85 percent threshold and the tax code changed so that cooperatives were responsible for paying tax on the share of their income earned from all activities except providing electricity to members, then the effective subsidy would be less than that shown in Table 4.

Part 5

Loans and Loan Guarantees Through the RUS

The Rural Utilities Service (and its predecessor, the Rural Electrification Administration) has been making low-interest loans to rural electric cooperatives since its inception in 1936. The interest rates paid on these loans range from 2 percent to the current U.S. Treasury borrowing rate. These low-interest loans have enabled successful completion of rural electrification, the original mission of the RE Act.

The RUS makes loans to both types of rural electric cooperatives – distribution cooperatives, and power supply (G&T) cooperatives. Distribution cooperatives own and operate distribution facilities and distribute electricity to their retail customers (who have historically been the cooperatives' owners). Power supply (G&T) cooperatives own and operate generation facilities and transmission assets. In many regions distribution cooperatives affiliate as joint owners of the power supply cooperative, and they are bound to purchase power from the power supply cooperative. Of the more than 900 cooperatives in the U.S., almost all G&T cooperatives and 700 of 850 distribution cooperatives borrow most of their capital from the RUS.

Loan subsidies and guarantees decrease the cost of capital for electric cooperatives, particularly for generation projects. One recent estimate shows that the average cost of capital for IOUs is 0.94 cents per kilowatt hour, while electric cooperatives have a cost of capital that is 0.65 cents per kilowatt hour – 69 percent of the IOU's average cost of capital. This subsidy consequently decreases the total cost of building new generation capacity for electric cooperatives, which face a total cost per kilowatt hour of 2.75 cents per kilowatt hour relative to the IOU cost of 3.04 cents per kilowatt hour.⁴⁵

Subsidized loans were not part of the original remit of the REA.

Originally, REA loans were made at the Government's cost of money. There was no subsidy. Indeed, none was intended. Interest rates on REA loans fluctuated as did the cost of funds. When the REA rate was set in law in 1944 at 2.0 percent, the Government's cost of funds (weighted average interest rate on marketable Treasury issues) was only 1.7 percent. The Government's cost began to exceed 2.0 percent in 1952 and by 1972 had reached 5.1 percent. In 1973, the REA rate was set at 5.0 percent by Congress. This rate remains today even though the government's cost of funds was 8.84 percent in 1990.⁴⁶

Thus the fixed rate structure on REA/RUS loans has led to taxpayer subsidy of electric cooperatives, especially since the interest rate increases of the 1970s.

The REA's original loan programs, from 1936 through the mid-1960s, focused on distribution cooperatives because extending distribution was the primary mission of the RE Act. In the 1960s, though, the REA began

making loans to power supply cooperatives. This change, combined with the policy change in 1973 allowing the REA to guarantee loans made by non-REA lenders, dramatically shifted the share of the REA's loan portfolio toward power supply cooperatives. These loans have been more risky and prone to loss than the traditional distribution loans; in fact, loans to power supply cooperatives have been almost the only source of loan losses.

Between 1974 and 1985 the REA made commitments to guarantee \$32.6 billion in loans to 48 G&T cooperatives to finance generation and transmission projects.⁴⁷ This increasing indebtedness revealed itself in the financial statistics of the borrowers, which showed decreasing times interest earned ratios (TIERS), even going below the stated REA threshold TIER of 2.0.

Electric distribution cooperatives have traditionally been the bulk of cooperatives in the U.S.⁴⁸ In 1978 there were 983 REA borrowers; 934 (95 percent) of those borrowers were distribution cooperatives and 49 (5 percent) were generation and transmission (G&T) cooperatives.⁴⁹ In 1980, while some distribution cooperatives still required subsidized loans to ensure that rural customers had access to electric power at prices comparable to urban consumers, other distribution cooperatives could easily have obtained credit in the retail credit market, without the REA's subsidized loans. The GAO analyzed the financial status of 110 REA borrowers, and found that 42 percent of them could qualify for non-REA loans at reasonable interest rates. However, of that 42 percent, some borrowers did serve substantially rural populations and had higher operating costs, so requiring them to seek retail credit financing could run counter to the original mission of the RE Act. For other borrowers, though, the GAO recommended discontinuing their participation in the REA insured loan program.

Another aspect of the 1980 GAO distribution report is their recommendation that borrowers and the REA strive to increase the equity levels of borrowers, in keeping with the 1973 amendments to the RE Act. This step would facilitate the goal of borrower self-sufficiency. The REA had not made substantial progress in encouraging the financial self-sufficiency of borrowers, and that the loan program as implemented has serious equity implications. The GAO recommended that the REA establish guidelines for determining which borrowers would be able to receive and repay loans from retail credit providers, and that the REA compare borrower operating costs with the operating costs of investor-owned utilities to determine the size of the loan required for the cooperative to charge comparable rates to its consumers. While the report acknowledged that rate comparability across regions and different utilities would be complex, the GAO encouraged the REA to adopt some objective means of determining which borrowers require loans to bring their rates in line with those of urban customers. Such a benchmark would improve the equity of the insured and guaranteed loan programs.

While fewer borrowers are G&T cooperatives, their loans tend to be larger and have historically been more risky. G&T cooperatives (and loans to them) are a relatively recent development in the history of electric cooperatives:

As the distribution network expanded nationwide, the distribution cooperatives began to form member-owned generation and transmission (power) cooperatives. Initially, these power cooperatives served largely as a service organization for the members, arranging and contracting for the purchase of bulk power which in turn was sold to distribution members. Subsequently, some of these power cooperatives began to build their own generating capability to reduce their dependence on outside sources of electric power.⁵⁰

In a 1980 report on the loan process for G&T cooperatives, the GAO focused on the importance of capital budgeting and demand forecasting in enabling the REA to make cost-effective loans to generation cooperatives, with the then-timely objective of building more generation capacity to address the nation's energy needs. As in the distribution cooperative report in the same year, GAO encouraged the REA to explore every option for putting eligible borrowers in the retail credit markets. Given the expectation of increasing capital requirements to expand power generation in the 1980s, the report recommended expanding the use of non-government lenders for such projects. Most of the REA's guaranteed loans were financed using Treasury funds through the Federal Finance Bank (FFB), a wholly-owned government finance agency, using non-government lenders infrequently. In addition to private lenders and the REA, alternate financing sources also exist, such as the National Rural Utilities Cooperative Finance Corporation and banks for cooperatives.⁵¹ The existence of these multiple funding sources for G&T loans raises the question of how necessary the REA loans programs were by the 1980s.

Furthermore, the RE Act stated that the REA could not charge a fee for loan guarantees, so the interpretation of the Act has meant that the REA bears all of the risk of the loan, including the borrower's default risk. The borrowers in this case have no incentive to manage their own risk, so the default risk is actually higher; this incentive is called moral hazard. Since the REA bears those risks, the cost of electric loan defaults falls upon taxpayers. As part of incorporating more private lenders into the loan program, this GAO report and others have suggested sharing some risks associated with guaranteed loans to the borrower and the non-government lender. One way to distribute this risk is by decreasing the guarantee level below 100 percent. Shifting this risk would eliminate the incentive facing the non-government lender to make loans to borrowers with high probability of default, and it would lower the moral hazard problem facing the borrower due to the 100 percent guarantee.

As early as 1980 the GAO also recommended, with strong opposition from the Department of Agriculture, putting REA insured and guaranteed loans officially on budget.

Both the FFB and the REA are off-budget agencies. Hence, REA's insured and guaranteed loans are excluded from the Federal budget totals. This despite the fact that insured loans and FFB loans guaranteed by the REA are, in effect, direct Government loans funded ultimately through the Treasury. Outlays under these programs have been high in the past and projections are that they will increase further. That such outlays, coupled with the burgeoning outlays of other off-budget credit programs, are not included in the Federal budget totals is of concern to us. We have consistently opposed off-budget programs principally because such programs do not have to compete for resources within the same decision framework as on-budget programs, although such programs may be equally worthwhile.⁵²

In 1980, the total outstanding federal and federally assisted credit was \$600 billion, and much of it was off-budget. The budget treatment of REA (and then RUS) loans changed in 1985 with the Gramm-Rudman-Hollings Deficit Control Act, after which REA/RUS loans were recorded as outlays.⁵³ However, many types of loan restructurings are still considered off budget, so the true costs of electric loans are difficult to estimate.

In 1990 the REA estimated the financing costs of the loan program, using a cost differential methodology. Estimating the net cost of the loan programs as the difference between the government's cost of money and the insured or guaranteed interest rate that borrowers paid (typically lower than the government's cost of money), the REA estimated that "[t]he annual value of the subsidy from interest-free loans to REA is \$235.4 million, or about \$3.8 billion since the [revolving] fund was authorized."⁵⁴

Other than the cost differential, another possible cost associated with the loan programs is the likelihood of loan default. Many loans are in potential risk of default, and while the actual default rate on REA/RUS loans or guaranteed loans is not well known, many past and current REA/RUS borrowers have experienced financial difficulties. In the 1980s some G&T cooperatives were in financial trouble and finding it difficult to repay their REA loans. Between 1985 and 1988, nine cooperatives defaulted on their government loans. The Congressional Research Service estimated the losses to the government on these loans at \$600 million, but said that the potential losses could even go as high as \$6.5 billion.⁵⁵

More recently, the GAO estimated that in 1996, borrowers in financial difficulty owed over \$8 billion of the outstanding principal of \$37.5 billion (21%) owed to the RUS. 12 electricity borrowers accounted for almost all of the \$8 billion, and in total owed almost 25 percent of the entire RUS loan portfolio. None of the telecommunications borrowers were in financial distress.⁵⁶ The RUS attributed much of the electricity delinquency to loans dating as far back as the late 1970s for nuclear generation and transmission construction projects.

Several of these financially strapped borrowers subsequently declared bankruptcy and could not repay their loans. Between 1994 and 1997 the RUS wrote off \$1.7 billion in loans to five electricity borrowers. Four of those five were power supply, or G&T, borrowers.⁵⁷ The GAO further estimated that the ongoing financial difficulties of many RUS borrowers could leave taxpayers at risk of \$10 billion in losses through loan write-downs and write-offs to these troubled borrowers. The most dramatic and costly RUS borrower bankruptcy was Cajun Electric Power Cooperative, which declared bankruptcy in 1994. At the time of the bankruptcy, Cajun's loan balance with the RUS was \$4.2 billion.⁵⁸ After estimating the accrued interest from 1994 through October 2000, and subtracting payments to the RUS from Cajun and the bankruptcy court, the most recent estimated loan loss for the RUS on Cajun is \$5.36 billion.⁵⁹ RUS reports its loan loss on Cajun as \$3.1 billion, in nominal terms. Not only does that estimate exclude accrued interest since 1994, it also does not report the figure in current dollars. Doing so would increase the loss estimate substantially.

Cajun Electric's 1994 Bankruptcy

In the most dramatic bankruptcy filing of any RUS borrower, Cajun Electric Power Cooperative filed for Chapter 11 protection on December 21, 1994. Cajun Electric had invested heavily in the River Bend nuclear power plant, which resulted in a \$4.2 billion debt to the RUS by the time of the bankruptcy filing. The event triggering the bankruptcy filing was a conflict between the RUS and Louisiana state regulators, who had ordered Cajun Electric to reduce their rates to member distribution cooperatives by 10 percent because they did not believe that Cajun Electric's River Bend investment was sufficiently useful. In fact, the River Bend plant proved to be too costly to complete. The RUS, Cajun Electric's largest creditor, ordered them to ignore the state PSC's order because the rate decrease put Cajun Electric in default on its RUS debt. Cajun Electric declared bankruptcy to take advantage of Chapter 11's debt restructuring provisions. Much of Cajun Electric's debt to the RUS is still outstanding, and would exceed \$8 billion including accrued interest.

This case illustrates many of the distortionary decisions made by RUS borrowers. The growing ability of G&T cooperatives like Cajun Electric to obtain RUS loans has been accompanied by an increase in the default risk in the RUS loan portfolio. Availability of RUS loans also encouraged investments that might not otherwise have been considered reasonable. RUS loan availability also interacted with federal policy in the 1970s that pushed G&T cooperatives to diversify out of natural gas generation and into nuclear and coal, creating incentives for G&T cooperatives to invest in large nuclear and coal generating plants. The loans

supporting these investments carried larger default risks than the REA had seen in its loans to distribution cooperatives.

The 1998 GAO report also reinforced the conclusions and recommendations of the 1980 reports discussed above, indicating that many RUS borrowers were indeed sufficiently financially healthy to obtain credit in retail markets, often at interest rates lower than those they could obtain through the RUS. They note that “the RE Act does not require RUS to attempt to move financially healthy direct loan borrowers in the electricity and telecommunications programs to commercial credit sources.”⁶⁰ Their overall recommendations in this report were to (1) implement loan and debt limits to reduce potential RUS losses; (2) institute a lower repayment guarantee; and (3) introduce a transition plan for financially healthy borrowers to move to commercial credit. The GAO and many other analysts have made these recommendations repeatedly over the past three decades.

In some cases when a borrower becomes financially troubled, the RUS performs a loan “workout,” or restructuring. Because loan workouts are not subject to Budget Enforcement Act controls, the costs of these workouts are not transparent. In 1999 the GAO analyzed RUS loan restructurings to two particularly troubled borrowers (both G&T cooperatives). Loans to these two borrowers alone will cost the federal government (and consequently, taxpayers) between \$295 million and \$305 million in anticipated losses, even after restructuring.⁶¹ While the RUS performed the restructurings correctly according to the Federal Credit Reform Act of 1990, the RUS did not fully report all costs and estimated losses associated with restructured loans. Only \$30 million of the anticipated \$295-305 million anticipated loss was reported on Rural Development’s 1999 financial statements.⁶² The RUS wrote down approximately \$300 million dollars in loans through instruments that would mask the true losses experienced, such as non-interest-bearing notes and notes with contingent loan payments. Furthermore, because loan restructurings such as these are characterized as “workouts,” they do not require new budget authority, and are thus not typically incorporated into such financial statements because proper documentation is often unavailable.⁶³ Because of the lack of documentation policies for such costs for the entire electric loan portfolio, the GAO recommended to Congress that it not rely on Rural Development’s financial statements and estimates of RUS losses.

The issue of the RUS loan programs as a federal energy subsidy was also part of a recent analysis that the Department of Energy (DOE) requested from its Energy Information Administration. They found that

*In 1998, the RUS electricity program had advanced loans of nearly \$21 billion (both hardship and direct municipal rate loans) and had guaranteed loans of nearly \$26 billion. In 1998, RUS borrowers had outstanding long-term debt approaching \$33 billion.*⁶⁴

The DOE calculated a support level for 1998 of between \$965 million and \$1,557 million.⁶⁵ The REA 1990 estimate was \$235.4 million, which is \$280.8 million in 1998 dollars. Thus in real terms, the estimated loan subsidy in 1998 was 3.4 to 5.5 times the 1990 estimate. Note also that these estimates do not incorporate any calculation of the financial benefits of loan guarantees to power supply cooperatives, and are thus lower bound estimates of the subsidy from the loan program. Similarly, the PHB study mentioned above used 1995 data to estimate the cost of capital subsidy to electric cooperatives at \$1,158 million. This number is close to the upper bound estimate from the DOE study.⁶⁶

Thus the REA/RUS loan programs are fraught with inefficiencies that impose great costs on taxpayers, most of whom are not cooperative members. Electric cooperatives do not have to adhere to the market discipline that borrowers in commercial credit markets do. Monitoring and bond rating by companies like Moody’s and Standard & Poor’s impose market discipline on the management and decisions of IOUs, because the effect of

decreased credit ratings on them is costly. Cooperatives, with most of their debt owed to the RUS, face no such discipline on their management and decision-making.

The current RUS view of its mission in its loan program is to provide financing for rural infrastructure projects, including electricity, water, gas, cable television and telecommunications. RUS Administrator Wally Beyer states that this financing is critical, but in reality rural borrowers have a variety of private sector financing options, including the National Rural Electric Cooperative Finance Corporation, the Bank for Cooperatives, and commercial lenders. The REA/RUS procedures have provided expensive credit to electric cooperative borrowers, some of whom continue to receive loans even after being acknowledged as financially insolvent. Taxpayers should not have to bear these costs, particularly with the promise of greater efficiency and choice that electricity deregulation holds.

In 1991, then-administrator of the REA, Gary Byrne, suggested that the REA return to its original mission “of providing supervised credit that insures repayment, for the purpose of expanding and maintaining rural electric and telephone markets, and with a goal of encouraging borrowers to enter private credit markets.”⁶⁷ Ten years later, the RUS has redefined its mission and moved substantially away from a focus on repayment and private credit. Reason recommends that the RUS reconsider returning to its original mission, which would be in keeping with a dynamic, restructuring industry and keeping rural electric loans cost effective for taxpayers.

Part 6

Cooperative Preference Purchases of Federal Power

Electric cooperatives and public power companies are accorded preference in purchasing power generated by federal power marketing administrations (PMAs). Preference essentially originated with the Federal Power Act of 1920; “with the Federal Power Act of 1920, preference began to evolve from serving ‘municipal purposes’ to serving particular classes of users, such as public bodies and cooperatives.”⁶⁸ In the 1920s power preference was intended to create competition and ensure reasonable electricity rates.

Typically produced by relatively inexpensive hydro generation, federal power is usually sold to different customers at different rates depending on their preference status. This case particularly holds in the Pacific Northwest, where the Northwest Power Act of 1980 required the Bonneville Power Administration “to generally charge lower rates to preference customers than to nonpreference customers. Such rates are based upon the cost of the federal system resources used to supply electricity to those customers.”⁶⁹

Preference power distorts power markets, and does so to different degrees in different regions. Preference power creates distortions by artificially imposing power price differences where markets would otherwise result in common prices through arbitrage. The hierarchy of preference power also creates a fairness issue – favoring certain providers benefits some customers over others, even though we all pay to support federal power through tax payments.

The most recent estimate of the benefit to electric cooperatives from having power preference is from the PHB study. According to that study, in 1995 the benefit of buying federal preference power relative to the average wholesale cost of power to IOUs amounted to \$984 million.⁷⁰

Many discussions of federal preference power beg the question of why the federal government continues to be involved in commercial electricity generation. As generation becomes an increasingly competitive industry, the federal government should exit the generation industry.⁷¹ Short of privatization, the removal of preference power purchases would open the way for the government to auction its generation in commercial markets. Moving to open auctions of federal power would eliminate the taxpayer support of federal generation, and would make federal hydropower a power source for the whole nation and not a source of regional market distortions, as it is now.⁷² Reason recommends the elimination of preference power, which will result in improved efficiency in electricity generation markets and decreased taxpayer subsidies of preference purchasers.

Part 7

Conclusion

With the changes and challenges facing the electric utility industry, the time has come to revive these many questions about the tax, legal and regulatory treatment of electric cooperatives. While electric cooperatives can play a vibrant and dynamic role in the electricity industry of the future, we should reinvestigate their tax treatment, capital market benefits, and federal preference power status. Similarly, we should reexamine the role of the RUS and their evolution away from their original mission to a new mission of “economic development.” Current policies governing the electric cooperatives and the RUS date from a bygone era, although cooperatives and the RUS have evolved to maintain a role in the industry.

The legislative and regulatory framework in which electricity cooperatives operate has not evolved to keep up with the many changes in the electricity industry and the way that cooperatives do business now, and are likely to do business in the twenty-first century. Changing that framework to one that is more flexible and forward-looking would encourage efficiency in the electricity industry, and would eliminate income redistribution to higher-income individuals.

Dan Michael Berry, in his study of the relative productive efficiency of cooperatives and IOUs, recommends market-oriented policy prescriptions:

The policy prescription for this ailing sector of the power industry seems readily apparent: treat all private electric utilities in the same manner. That is, all ownership shares in private utilities should be tradable, and income earned on all such property should [be] taxed in the same manner. As property rights theorists explain, only when property rights are well-defined, enforceable, and tradable will markets operate efficiently.⁷³

These recommendations are consistent with Reason’s findings. The current treatment of cooperatives is an inequitable subsidy of activities that differ substantially from the original intent of providing rural infrastructure. We recommend the following:

- *Tax treatment* – Congress should, at a minimum, revise the tax code so cooperatives do not pay taxes on the revenue they generate from selling to their members, but treat them like any other for-profit taxable corporation for the remainder of their revenue (both in having to pay taxes and in enabling them to benefit from tax credits and accelerated depreciation).
- *Loans and loan guarantees* – If continued, loans and loan guarantees should be determined by a combination of population density and average household income in the metropolitan statistical area, not by “once eligible, always eligible” as it is now.
 - Move financially healthy borrowers to commercial credit.
 - Implement loan limits, which will enable RUS to control their risk of loss.

- Do not offer 100 percent loan guarantees, which increase default risk and encourage moral hazard in borrowers.
- Do not loan to delinquent borrowers, which are risky and likely to default at high cost to taxpayers.
- *Federal power* – Congress should remove the preference power hierarchy from the sales of PMAs to cooperatives and municipal utilities. Sell to all qualified buyers on equal footing using an open auction framework.

Implementing these recommendations would contribute to a truly competitive electricity industry, with a non-discriminatory role for cooperatives. If policy does not account for the challenges of integrating cooperatives into the increasingly competitive electricity industry without distorting markets, at best some people will not enjoy the full benefits of competition, and at worst true competition will not emerge as long as cooperatives are excluded.

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