

On the Shoulders of Giants

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“If I have seen farther, it is by standing on the shoulders of giants.”

Isaac Newton

Knowing our history as an electric cooperative movement can help us in numerous ways to make better decisions for our future. A significant part of that history is associated with names that today may not be as well known as perhaps they should be—names such as Gifford Pinchot, governor of Pennsylvania in the 1920’s, David Lilienthal, a member of the original Tennessee Valley Authority board, Morris Cooke, first administrator of the Rural Electrification Administration, and J.D. Ross, the first administrator of the Bonneville Power Administration. Their contributions are worth knowing. They are the giants of previous generations on whose shoulders we stand today.

We often hear that the creation of the Rural Electrification Administration (REA) marks our beginning as an electric cooperative movement. Some would even say that we are the REA. In fact, while the REA has been the prime mover of rural electrification from a financing, accounting and engineering standards perspective since 1935, our origins as electric cooperatives are to be found well prior to its creation.

In fact, the earliest documented electric cooperatives in the United States are Stoney Run Light and Power, Granite Falls, Minnesota, formed in 1914, and Kegonsa Electric, Stoughton, Wisconsin, formed in 1916. Prior to the creation of the REA in 1935, there were about fifty electric cooperatives nationwide, concentrated heavily in the upper Midwest.

If we introduce the historical concept of “public power” as well, then it is noteworthy to mention that one of the oldest municipal utilities in the country was incorporated in McMinnville, Oregon in 1889, only ten years after the invention of the light bulb. In 1902, also in the Pacific Northwest, under what was called the Reclamation Act, mutual companies—very similar in organizational form to cooperatives—began to form. They were created to take electric power from the first federal dam in the region, the Minidoka dam in Idaho. Mutual electric companies were soon created in Washington State as well, and NRECA today has five such members.

So we can trace the idea of consumer ownership of electric service providers in the United States back to the turn of the twentieth century. Big power monopolies were beginning to form, and electric power regulation and consumer protection against those monopolies were concepts being openly debated.

The Origins of Electric Power Regulation In The United States

In 1898, the National Electric Light Association (NELA) held an annual meeting that would have far-reaching consequences for the electric utility industry. Member CEOs of newly formed investor-owned electric companies had come together to discuss the future of electric competition.

The key speaker at this meeting was NELA's newly elected president, Samuel Insull, previously a bookkeeper for Thomas Edison and then a major executive in the fledgling industry. He shocked the gathered assembly with a surprising proposal.

He suggested that competition was not in their best interest, and that the companies should together promote the idea of state regulation of utilities in return for the granting of monopoly service territories. Insull felt that this would ensure rapid industry growth with minimum duplication of physical plant.

His proposal was initially very controversial. In fact, seven years later, in 1905, there was only one state that had any regulatory oversight—Massachusetts had formed an advisory commission back in 1890 that still had some authority. So to move his idea forward, Insull formed a Committee on Public Policy that met over a three-year period and issued its report at the 1907 NELA annual meeting.

The report of the Committee on Public Policy soon gained widespread acceptance; and the same year of 1907 witnessed the creation of the Wisconsin and New York Public Service Commissions.

Why would investor-owned companies ask to be regulated? Insull's proposal might at first blush appear to have been more in the public's best interest than in the interest of the power companies. After all, it was the first clear expression of the principle of the "regulatory compact"—acceptance of the obligation to serve in return for the right to monopoly service.

But there was more to the story. Investor-owned companies were not necessarily adding a great burden to their business by agreeing to regulation. They knew that the commissions could be controlled with the appropriate level

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of effort. They knew that intervention in rate cases would be too expensive for consumer advocates. And they were right. Take Wisconsin, for example. From 1907 to 1912, the commission approved fifty of fifty-two requests for rate increases. And of thirty-nine requests for rate relief submitted by Wisconsin cities and towns, only 11 were granted.

Investor-owned companies were able to establish virtual control over state regulators, and with the guaranteed income of protected monopoly service, they proceeded to build major enterprises through the use of holding companies. Insull himself owned Commonwealth Edison, which in 1907 was already a conglomerate of 20 companies, unregulated at the holding company level.

The Cooperative Option And The First Public Power Brand

Was anyone fighting back? Absolutely. In 1909, as Samuel Insull was beginning to build his holding company empire, Gifford Pinchot, the chief forester under President Theodore Roosevelt, convinced Roosevelt to create the Country Life Commission. The Commission was intended to call attention to the growing disparities between urban and rural life.

Among many other issues affecting rural life, the Commission report focused attention on the lack of electric power in rural areas. In his letter submitting the final report to the Senate and the House of Representatives, Roosevelt himself had suggested that cooperatives were the best mechanism to improve rural life:

The cooperative plan is the best plan of organization wherever men have the right spirit to carry it out. Under this plan any business undertaking is managed by a committee; every man has one vote and only one vote; and everyone gets profits according to what he sells or buys or supplies. It develops individual responsibility and has a moral as well as financial value over any other plan.

So as early as 1909, the contrast between investor-owned interests and a cooperative option had begun to emerge, thanks to the hard work of Gifford Pinchot and the insight of Theodore Roosevelt.

After World War I, and fourteen years after the Country Life Commission report was presented to the Congress, Gifford Pinchot was still seeking to bring electricity to rural areas. In 1923, recently elected Governor of Pennsylvania, Pinchot hired Morris Llewellyn Cooke to study the potential for electrifying all of Pennsylvania under an initiative he called “Giant Power,” a curious name for a

powerful idea, one that Clyde Ellis, NRECA's first general manager, characterized as having "far-reaching influence in later years on both the rural electrification and generation and transmission programs."

The idea, as developed in the study by Cooke and a team of engineers, was to "pool" all electricity generated by coal at the mouth of Pennsylvania's mines. Once pooled, the electricity would be shipped over "giant" transmission lines to utilities throughout the state and specifically to non-electrified rural areas. This was an extraordinary suggestion, since, at the time, we had nothing resembling today's electric grid. Utilities were primarily localized generation and distribution systems.

In an effort to implement this idea, Pinchot called for the creation of a Giant Power regulatory board. Control would no longer be with the large holding companies:

[Giant Power] is the pooling of supply—not the disposal of surplus—and the chief idea behind it is not profit but the public welfare...The main object of Giant Power is greater advantage to the people. Giant Power will...set aside the threat of the most dangerous monopoly ever known...There is already advancing with immense rapidity, a consolidation of companies...[that] has in many respects reached national proportions. The situation which this consolidation clearly foretells is like one in which every source of steam power in America could be under the control of a single monster corporation...It is as though an enchanted evil spider were hastening to spread his web over the whole of the United States and to control and live upon the life of our people. (Giant Power, pg. viii, ix, xi)

The line in the sand was drawn. By the mid-1920s, a decade before the creation of the Rural Electrification Administration, a clear difference had been established. On the one hand, there were the investor-owned utilities, rapidly expanding their control through holding companies and acquisitions. On the other hand, there were the advocates of electric cooperatives and "Giant Power," otherwise referred to as the "anti-monopolists."

The investor-owned momentum nonetheless grew even stronger during this period. By the end of the 1920's, ten utilities controlled 75 percent of the U.S. electric business. Giant Power had a long road ahead if it was to reverse the trend.

In many ways, looking at our history generationally, Gifford Pinchot can be considered a member of the first generation of electric cooperative advocates. If we think of generations as careers lasting thirty-five to forty years, then the first generation would span from the beginning of the twentieth century to the creation of the REA in 1935. Others names in that first generation would include Robert LaFollette of Wisconsin and George Norris of Nebraska. In fact, Pinchot, LaFollette and Wisconsin state legislator Carl Thompson had formed the Public Ownership League in 1916 to promote the idea of grassroots ownership of electric systems. They built a foundation on which to challenge the interests of the large power companies. They established a grassroots base from which to make the case for consumers of electric power. Their efforts paved the way for the federal legislation that made the electric cooperative movement a reality.

The introduction of federal legislation supporting public power

In 1933, two years before passage of the Rural Electrification Act, the United States Congress passed a law authorizing the creation of the Tennessee Valley Authority. The TVA Act of 1933 dramatically changed the public policy and geographic landscape. It brought the authority of the federal government into the mix, representing the first official federal involvement in support of rural electrification. And it gave preference in the electric output of the new hydroelectric dams to “cooperative organizations of citizens or farmers.”

Roosevelt’s vision, of course, went well beyond the TVA.

In creating TVA, President Franklin Roosevelt had drawn on his experience as Governor of New York in developing hydroelectric power on the Saint Lawrence River. Governor Roosevelt’s creation of the Power Authority of the State of New York in turn was modeled on Gifford Pinchot’s Giant Power concept. So Pinchot’s ideas had finally taken hold. And a second generation was ready to take up the banner, among them David Lilienthal.

David Lilienthal was one of the three original directors of the newly-formed Tennessee Valley Authority. He was hired to the post from the Wisconsin Public Service Corporation. In Wisconsin, he had been an inside witness to the uncontested rate increases of the power companies. He was only too happy to enter the fray on the side of consumers.

Lilienthal brought with him to TVA strong personal concerns about the power and positioning of the power companies, and he immediately clashed with TVA Chairman Arthur Morgan over a very fundamental question—should TVA enter

into agreements with the investor-owned companies to distribute power? TVA's chairman wanted to follow that path; but Lilienthal, drawing on his Wisconsin experience, was not willing to rely on the power companies. He instead proposed a network of municipal utilities and cooperatives to handle distribution.

Franklin Roosevelt backed Lilienthal and removed Morgan as chairman. Lilienthal's plan was adopted, and he became chairman of TVA in 1941. He oversaw the construction of twelve dams in his five years as chairman. TVA's website (www.tva.gov) notes that this was "a feat that has been called the largest engineering and construction project in the history of the U.S., exceeding even the Panama Canal." And the power was to be distributed by electric cooperatives, not investor-owned companies.

Roosevelt's vision, of course, went well beyond the TVA. An editorial cartoon of the time shows him pointing past a TVA hydroelectric dam to a horizon that is labeled "country-wide community power projects." It was the Rural Electrification Administration that was to fulfill that dream, as authorized by executive order as a temporary relief agency on May 11, 1935.

Morris Cooke, the same Morris Cooke who was the principal author of Pinchot's Giant Power study, was named as REA's first administrator. Senator George Norris, who at the time was considering introducing legislation to make REA a permanent agency, asked Cooke to describe his views as the new REA Administrator. Cooke responded this way:

Much of our planning has been directed to reducing the cost of service to the rural consumer. This can be done by simplifying and standardizing the type of line construction, by planning for extensions to serve entire areas to affect the economies of mass construction...(and) by encouraging rates which promote the abundant consumption of electricity.

Those principles have guided the REA, now the RUS, and electric cooperatives ever since and allowed for the creation of the backbone electric distribution infrastructure of the U.S. electric grid that remains so important today. Distribution planning wasn't the endpoint of Cooke's thinking, however. As Administrator he would try hard to convince power companies that they needed to offer reasonable rural retail rates if they were to be allowed to provide power through the REA loan program. In November of 1935, Cooke in fact turned down a loan to Wisconsin Power & Light on the grounds that the company's rural retail rates were too high. His experiences in negotiating with power companies

led him to the conclusion that the power industry “is markedly without any sense of social justice or public service. It is operated essentially as a secret society.”

According to Milton Chase, long-time REA and CFC employee and author of the book [Search for Power](#), Cooke didn’t initially look to cooperatives to meet the challenge. He was instead hopeful that power companies with REA loans could handle most of the job. But that was not to be the case, partly because of the passage in 1935 of the Public Utility Holding Company Act (PUHCA).

PUHCA was, in no small measure, a counterreaction to Samuel Insull’s efforts to create industry dominance through his unregulated holding company approach. The power companies had watched the quick growth of TVA from the sideline, as David Lilienthal insisted that power delivery was to be through cooperatives and municipal utilities. Feeling further threatened by PUHCA’s regulatory reach, they chose, for the most part, to refuse to cooperate with Cooke and the federal government’s latest entry into the power market—the new REA.

It was then that the cooperative model, a popular concept in the early years of the twentieth century, emerged as the best way to proceed, not only for distribution of electricity but also for new generation. If the investor-owned utilities were not willing to work with REA, then why not let the people take control of their own destiny? In fact, the permanent REA, established by law in 1936, immediately began to address the need not only for cooperative distribution systems but also for cooperative control over power supply.

Power to the people

Strong opposition had grown quickly among investor-owned utilities to the idea that cooperatives should have any generation ownership. Incredibly, legislation was even introduced in 1936 to require the Federal Power Commission, the predecessor to the Federal Energy Regulatory Commission, to certify that no other reasonable source of power was available before the REA could make a generation loan. The legislation failed, and the next several years into the 1940s witnessed the creation of seven “federated” cooperatives, or G&Ts—Central Electric and Federated Electric in Iowa; Dairyland, serving in Wisconsin, Iowa and Minnesota; Rural Co-op Power and Border Counties in Minnesota; Minnkota in North Dakota and Minnesota; and Brazos in Texas.

Milton Chase reports that these G&Ts delivered power at 1.15 cents per kilowatt-hour. As Chase put it:

This compared with 1.05 cents charged by power companies,
1.10 cents by municipalities and .51 cents by federal

agencies. Considering that the G&Ts were built where power supply was scarce, and that distribution co-ops usually had to build substations and additional lines when buying from power companies and municipals, the G&Ts were doing well.

Chase further observed, following the cooperative principle of independence and autonomy from any entangling alliances, that “all of the (operating G&Ts) were basically independent systems, both physically and in planning. The total needs of their member co-ops were supplied from REA-financed plants over REA-financed transmission.”

The vision had been realized—REA-financed cooperative power plants over REA-financed cooperative transmission lines, created so that member consumers could provide their own electric service needs, fully independent and self-reliant. The cooperative model, only a concept at the beginning of the century, coupled with a federal financing and standards program, now offered consumers a real “anti-monopolist” alternative to the investor-owned utility/state regulatory commission model that had been unable or unwilling to address their needs.

And in the Pacific Northwest, the Bonneville Power Administration (BPA) was changing the landscape of the industry as well. With the strong support of Franklin Roosevelt, the Congress had passed the Bonneville Project Act in 1937. Similar to the TVA Act, the Bonneville Project Act specified that “the administrator shall at all times, in disposing of electric energy generated at said project, give preference and priority to public bodies and cooperatives.”

The preference principle included in the Bonneville Power Act remains in effect today, allowing cooperatives priority access to electric power and carrying forward the “anti-monopolist” concept. At a 1952 convening of electric consumers, the first Electric Consumers Conference sponsored by NRECA, APPA and several farm, labor and consumer organizations, President Truman’s Secretary of the Interior Oscar Chapman was forceful on this point:

[Preference] is a policy establishing equality for consumers as against monopoly in the development of our public power resources...Congress has consistently written into every law governing federal marketing of hydroelectric power the provision that the people’s power system, the public and cooperative power systems, should have a preferential right to distribute this power supply...This preference provision is the most effective antimonopoly provision to be found

anywhere in federal law...It is one anti-monopoly provision [that] when implemented by Congress with adequate appropriations for transmission lines—monopoly has found no way to circumvent, for it opens to consumers themselves an equal opportunity to secure economical power supply.

President Roosevelt appointed J.D. Ross as the first BPA administrator. His story is a fascinating one.

J.D. Ross was a Canadian electrical engineer hired by the city of Seattle in 1896 to create a municipal power system to offer some competition to the investor-owned utility then serving the area. This was a decade before Samuel Insull succeeded in gaining support for the idea of regulated monopolies, and head-to-head competition was the reality of the day.

As a public power advocate, Ross gladly accepted the job and went to work to create an alternative for consumers. By 1905 the Seattle municipal power system began serving its first customers. Lines were duplicated, and rate wars ensued. Electric competition had come to the Pacific Northwest in the opening years of the twentieth century.

Today a third generation, spanning from the late 1960's to the present, is transitioning.

Twenty-five years later a strange event took place. In 1930, over a dispute regarding the use of consulting engineers, Ross was fired by Seattle's mayor. He left Seattle and was immediately hired by the Power Authority of New York. There he became closely associated with then-governor Franklin Roosevelt. Although Ross was reinstated

in Seattle four months later, Roosevelt had gotten to know him well, stayed in close touch with his public power ally and named him BPA Administrator in 1937.

So if Gifford Pinchot, Theodore Roosevelt, George Norris and Robert LaFollette represent the first generation of our story, J.D. Ross and Morris Cooke bridge to a second generation represented also by Franklin Roosevelt, David Lilienthal, NRECA's Clyde Ellis and CFC's J.K. Smith, a generation that spanned from the major federal legislative initiatives of the 1930's through to the creation of the Cooperative Finance Corporation in 1968.

Today a third generation, spanning from the late 1960's to the present, is transitioning. It is a generation that witnessed the successful defeat of the Nixon administration's attempted shutdown of the REA in the early 1970's, the dramatic growth of the generation and transmission cooperatives and the shift from an electromechanical industry to a digitized one. It is a generation whose

leadership include Federal Power Commission Chair Lleland Olds, the catalyst for the creation of Basin Electric, NRECA's Bob Partridge and APPA's Alex Radin among many others.

The electric cooperative movement in the United States has done well. We began as a vision at the turn of the last century to offer consumers protection against monopoly control of electricity. Since that time we have participated fully in an industry that has grown to become a highly sophisticated interconnected grid.

We have used microprocessors and Internet technology to improve our system operations and to build new connections among one another in the electric cooperative network.

We have maintained our belief in the foundational importance of the cooperative principles and values. We have successfully fought against a significant number of hostile takeover attempts. We have created Touchstone Energy® as a new way of building member loyalty and of reaching out to younger generations of cooperative members.

We have built and operate a tremendous scope of generation capacity and have dramatically increased the efficiency of those plants and of our transmission and distribution delivery capabilities. We have responsibly and proactively addressed clean air and clean water issues and have introduced renewable energy technologies into our generation mix. We have successfully shielded ourselves from the extraordinary volatility of wholesale markets, through ACES Power Marketing and other cooperative arrangements.

Yet we continue to face misunderstandings about the positive consumer benefits of the cooperative business model. We continue to face efforts by investor-owned utilities to dramatically expand their market power through mergers and acquisitions. We continue to face a legislative and regulatory environment that does not clearly differentiate us as consumer-owned, self-reliant players in an extraordinarily critical industry.

We face the very same issues at the beginning of the twenty-first century regarding the nature and role of regulation and the importance to consumers of a cooperative alternative that were faced at the beginning of the twentieth century.

The challenge ahead is a serious one as a new generation of employees, managers and directors begins to join us. When we look to our history, there is no question that we stand on the shoulders of three generations of giants. They fought hard against formidable odds and against strong opponents to protect the interests of consumers and the cooperatives that serve them. They saw the

economic dangers of large monopolies and of markets controlled by a few large companies. They envisioned a grassroots, cooperative approach to leveling the playing field. And they succeeded.

As a new generation begins to emerge, we have the responsibility to ensure that they understand the legacy they are inheriting. The next generation has much to learn in order to maintain this proud tradition. We must recruit the best and the brightest of them to serve. We must mentor them. We must inspire them. We must give of ourselves so that the lessons of our history are not lost. As was the case one hundred years ago, nothing less than the future of the electric cooperatives and the right of consumers to self-reliance, independence and local control is at stake.



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