# Section 4

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# **Beyond 2011**

As Associated entered 2011, its remarkable first 50 years was like a story with a surprise ending. No one in 1961 would have dreamed Associated would be the super G&T it became. At that time, the vision was short and shaped by its powerful G&T owners. Get baseload generation built, accumulate some cash, build transmission lines and keep affordable power flowing to members.

"I think I can speak [for early leaders] when I say I don't think any of them could have visualized what Associated turned into. I certainly didn't. No one could have anticipated the kind of growth Associated and the cooperative system would enjoy through these years," said retired board member Bob Stagner from a perspective reaching back to the 1960s.

"Certainly the organizational period came at the right time in history. ... Had there not been an Associated, you would have had to invent one. It has grown and prospered because it filled a vitally important role in Missouri and Oklahoma and Iowa. And everyone on the national stage views it as a model of how to do it from a cooperative standpoint."

### A green light for nuclear

The dominating story of 2010 was fuel for the future. While Associated temporarily dodged a bullet as the U.S. Congress punted on energy legislation to cap carbon emissions and create a trading scheme, there seemed little doubt that coal's lock on generation was changing. Not that it

In north-central Missouri, a 345-kV transmission line brings power from Thomas Hill Energy Center to member systems.



Rail coal cars enter New Madrid Power Plant for unloading. With mounting environmental standards and compliance requirements, the future of fossil fuels for generation, including coal. is uncertain.

would go away, but if or when carbon regulation through Congress or the Environmental Protection Agency became a reality, then coal's dominant role would decline.

Jeff Davis of the Missouri Public Service Commission put coal's role in perspective. "There's one big challenge out there, and everything pales in comparison in dealing with carbon over the next 10 years. That's the big challenge any G&T is going to have to come to grips with. Right now there's no certainty, and so making the right decision without information is obviously difficult. That's going to tax the leadership ability of Associated the same as for other utilities," he said, adding that tough decisions are what leadership is all about.

The \$64,000 question for Associated was actually a \$1.4 billion one: whether to spend the money on scrubbers at the coal plants to further reduce emissions to comply with projected 2015 federal clean air requirements. That

commitment would keep the coal plants open and more than half of Associated's labor force employed. But if Associated spent the money and the federal government proceeded to regulate carbon emissions, then it could be a huge wasted cost.

Associated had two cards it might play. One was an experiment at the plants testing the feasibility of using sodium bicarbonate (baking soda) and other minerals to reduce acidic gases and metals from emissions. The test at Thomas Hill Energy Center, concluded in 2010 for about \$1 million, showed reduction of metals and SO<sub>2</sub>. Similar tests were under way in 2011 at New Madrid Power Plant and Chamois Power Plant. Environmental health and safety employees Todd Tolbert, Kim Dickerson and Rusty Rice took the lead in monitoring the tests, which if successful could represent a far less expensive option than \$1.4 billion scrubbers.

Another card was the mothballed scrubber Associated had used on Thomas Hill Unit 3 back in the years when it was burning high-sulfur coal. The feasibility of rehabbing the scrubber was being investigated.

Even if coal remained the primary generation fuel, Associated was preparing members for higher coal costs. Other countries competing for American coal were already driving prices up. Even more significant were rising transportation costs for coal. The legacy contracts between Associated and BNSF Railway and Union Pacific Railroad, negotiated by Jim McNabb and Gary Fulks, would end in 2011 and 2013, respectively. They were almost guaranteed to be replaced with tariffs expected to significantly increase the shipping costs of coal. While Jura firmly expected Associated's relationship with Peabody Energy and the railroads to endure and contracts to continue, Chris Cariker of KAMO Power predicted the new delivered costs of coal "will have a tremendous impact on costs to members."

In the meantime, two promising alternatives to coal – natural gas and nuclear - were discussed at the 2010 annual meeting. With the Chouteau 2 plant scheduled to come on line in 2011, Associated's combined-cycle gas fleet would

expand to 2,143 MW. Add the simple-cycle peaking gas plants, and it would total more than 2,750 MW. That would be enough, with coal, wind from four Missouri wind farms and hydropower from the Southwestern Power Administration to hold the line on additional generation until about 2023.

Would more gas be the answer to limited coal generation or was there a feasible nuclear option? It would be relatively easy to ramp up gas. Nuclear was attractive because it had no carbon trail, and, in fact, the board had been eager for years to pursue the nuclear option when the time was right. The Black Fox nuclear experiment of the 1980s was a distant memory – no current board member remained who had lived through that venture, which had cost Associated members \$120 million. Strategic partners like TVA and Ameren Missouri were using nuclear and might offer Associated an affordable nuclear option.

The nuclear option took center stage in mid-November when Gov. Jay Nixon of Missouri held a news conference at Associated's Headquarters to announce his support for more nuclear power generation in Missouri. Specifically, Associated, AMEC and a consortium of electric utilities in the state sought legislation that would allow the rate base to include costs incurred in obtaining an early site permit from the Nuclear Regulatory Commission for a potential new unit at Ameren Missouri's Callaway Plant in central Missouri.

The board had approved a long-range financial forecast and integrated resource plan that included the possibility of electricity from a partnership in a nuclear energy generator by about 2023. The governor's announcement did not bind Associated to building or partnering in a nuclear unit, but it signaled a green light that Associated was prepared to proceed with the legislative push and a site permit.

#### More issues and decisions on the horizon

While generation, fuel and environmental costs dominated boardroom talk in 2010, senior management and the board were preparing for other important decisions.

Associated's critical relationship with the International Brotherhood of Electrical Workers, a stable, respectful partnership for decades, was due to be tested in negotiations for a new contract in 2013. The current contract of nearly 18 years was a success story of cooperation and good will. About half of Associated's 665 employees were represented by the IBEW. Time and again, these employees demonstrated their loyalty to their plants and Associated, responding to emergencies and producing innovative solutions to save dollars, practice safety and improve processes. Their contributions were valuable, and they proved every day that an Associated employee was an Associated employee, union or not.

Jobs in an uncertain future for coal were certainly worrisome. Other utilities against which Associated compared itself were using more contract labor at coal-fired power plants, as much as 60 percent versus Associated's 40 percent, and that promised to be a point of future discussion.

Also expected to surface was the question of more rate increases. Wholesale rates, which held steady in 2010, would inevitably rise as fuel, environmental and transportation costs increased. Even with the recession and energy efficiency dampening member energy requirements for the short term, loads would slowly grow back to pre-2008 levels, planners predicted. How to tell that story to members and retain their trust promised to be a priority.

Tied to rising costs and changing generation would be the need for more capital, particularly if Associated participated in new nuclear construction. The loans likely would be the biggest ever if the yellow light for nuclear changed to green. How much could members bear?

Lenders already were evaluating Associated's options themselves. One of them, Jake Udris of CoBank, said, "On the supply side, Associated's generation fleet is evolving, and evolving generation is the next capital initiative. Associated recognizes that and changes the fleet over time, and that represents an opportunity for us. ... Our lending decisions will be made for the same reasons as in the past: a strong management team, sound financials, a sound



Barton County Electric Cooperative directors and staff tour the Chouteau Power Plant to view construction progress of Chouteau 2.

"... Associated's generation fleet is evolving, and evolving generation is the next capital initiative."

> - Jake Udris CoBank





From top: NW Electric Power Cooperative coordinated construction of the Atchison substation to connect the Cow Branch Wind Farm to the Rock Port-to-Tarkio 69-kV line; and

the Conception Wind Farm was connected with additional transmission facilities constructed by NW Electric. Transmission and long-term purchase agreements enable all four wind farms to be developed in northwest Missouri, providing power for about 55,000 member households.

business plan."

Vigilance in maintaining reliability compliance also would continue to consume more Associated resources. As board member Layne Morrill noted, the cooperative had already spent \$600,000 on compliance, not counting the retention of a Washington, D.C., law firm to help with legal issues.

Jura admitted that the ever-deepening layers of regulations "have been quite an adjustment for us," but, he added, "We're so far ahead of our peers, and that makes me feel so good. We're way out in front of the others."

Board member Fulks added that Congress was "deeply concerned" about transmission reliability, especially exposure to hackers, cyber-attacks, even physical attacks. "There's more interest in federal government regulations to make systems secure," he said. The big unanswered question for Associated was would the government find a way to control Associated's most treasured asset, transmission?

Transmission regulation already required Associated to walk a tightrope of compliance and conformity without being directly regulated by FERC. Another aspect of transmission also raised questions. Associated was perfectly located to be a conduit for carrying wind power from the Great Plains to cities in the East. But the giant transmission corridors necessary to carry that power – perhaps as wide as a football field - raised the prospects of litigious, notin-my-backyard battles over eminent domain and rights of way. Would Associated be caught in the cross hairs?

And, somewhere out there was perhaps the most critical issue of all: the succession of Jim Jura. Who could fill the big shoes of Associated's CEO whenever he should choose to retire?

In addition to these future decisions, the board and management continued to study where Associated was most vulnerable and develop plans to mitigate these risks. Among the risks: major, extended outages. Inadequate supplies of coal, water or gas. Problems related to large capital projects. The possibility of stricter ash disposal regulations. Major transmission system outages. Increasing transmission regulatory impacts. Any one of these could constitute a major crisis.

Collectively, these issues and risks were daunting. But master engineer Jim McNabb, reaching back through four decades of memories, had this to say: "I'm on the outside looking in now ... but the challenges Associated faces today just seem overwhelming. The challenge of coal, of coal generation, it seems like facing an impossible situation. But then when I look back, we thought the same thing in 1978. ... We faced challenges that just seemed overwhelming at the time and managed to work through them. This has always been a tough business, and Associated has always had to work hard to maintain its position ... but we always had the resources, the financial resources and the personnel resources, to work our way through them."

### The strengths to make the right decisions

What were those resources Jim McNabb alluded to. those institutional strengths that would see Associated through the same kind of challenges he had experienced? At least six come to mind.

#### #1 - The message

Julian Brix, who served on the Associated board at the time Jura was recruited in 1991, has continued to closely watch Associated in his subsequent career moves in the power industry. "Jim has always had the same message for 20 years." The message and the fact it hasn't changed are great strengths that Associated brings to the table in Brix's view and that of many of its strategic partners.

And what is that fundamental message? In a nutshell, the member's purse matters. It takes a lot of \$100-a-month "light bills" to keep a \$1 billion cooperative operating. In return, that cooperative was expected to keep delivering affordable power - the mission of Associated. Every board decision, every management move began with a methodical evaluation of the impact to the member's purse.

Jura's simple, consistent message of loyalty to members is the same message new employees quickly repeat. Talk

to a power plant employee, and words about serving the customer at the end of the line are part of the conversation. Certainly, Associated's management team has come to live and breathe that mantra. Speaking of that team, Bill Ekey of Commerce Bank, the indenture trustee, commented on its "concern for the bottom up as opposed to the other way. They know who they work for, and that's how they work every day."

For Jura, nothing was more important than keeping the member relationship vital. "If you look at the other 50 or so G&Ts in the country, all are about 50 years old like Associated. They all had the same mission, all had the same advantages, RUS financing, all were nonprofits. But some of them aren't there anymore. ... What did the successful ones have? What's clear to me is that in the ones who failed, members lost confidence in the G&Ts, and the G&Ts forgot who they worked for. The really good ones didn't lose touch," he said, "and I'm pleased to say that Associated is one of them," Jura said.

#### #2 - Leadership

Knowing who pays the bills kept Associated humble. Strong leadership kept it on course. Jura led his team into unexplored territory, albeit cautiously. His natural inclination to methodically analyze a situation was married to a drive to "get better" and an ability to forecast the next big wave of changes and ride it advantageously. That leadership also has stood the test of time.

"Associated has had strong leadership and been able to look ahead and deal with the challenges coming forward as opposed to reacting. That's how to make wise decisions and avoid big problems," said Glenn English, CEO of the National Rural Electric Cooperative Association.

Leadership also extended to the Associated board, which had not shied away from the tough issues management laid at its feet.

"I think Associated is going to maintain the strength they have had," said Horace Harrod of Farm Credit Bank of Texas.

Consultant Earl Gjelde of Summit Power Group noted the special nature of Associated's leadership. "Associated has been gifted with some tremendously talented individuals, who have created it the way it is and continues to be. ... Talents such as Jim McNabb, Gary Fulks, Duane Highley and Jim Jura, and the list goes on, are very special people in the industry. Associated has been able to attract them because ... of how it deals with people, both inside and outside, its willingness to step out in front, take some risks ahead of time, and do so in a prudent fashion. That attracts talent in a way that money never can."

#### #3 - Financial flexibility

A third strength Associated had in its arsenal of resources was financial flexibility. In 2011, its balance sheet never looked better. Though long-term debt totaled nearly \$1.7 billion at the end of 2010, lender confidence in Associated's ability to repay them was unwavering. Indentures, high credit ratings, syndicated loans, commercial loans, private placements all combined to place Associated in a position most G&Ts could only aspire to.

Looking at the more than \$140 million in long-term loans her company holds for Associated, Nancy Doyle of MetLife said, "We only make these size loans with people we feel very comfortable with. ... We're here for the long haul ... and look forward to a long and mutually prof<sub>lable</sub> relationship going out to 2039."

#### #4 - Generation and transmission

Associated's diverse mix of generation assets and control of one of the largest transmission systems in the country have allowed it to control its own destiny. Developing a gas fleet provided Associated with its own reserves rather than depending on other utilities. With hydropower to tamp down cost, wind to green up the mix, gas for flexibility and coal for baseload, Associated was well positioned to move in any number of directions for generation in its 50th year.

Likewise, in transmission, its physical location, continued financial investment in transmission – more than half

"... This has always been a tough business, and Associated has always had to work hard to maintain its position ... but we always had the resources ... to work our way through them."

> Jim McNabb retired Associated director of Engineering and Operations



From left: Associated board members Chris Cariker, Emery "Buster" Geisendorfer and John Farris.

"From its founding to today, there's never been a widespread power outage ... That's remarkable - 50 years of perfect bulk power service."

> - Gary Fulks Associated board member

a billion dollars over the last 15 years – many interconnect contracts and power marketing expertise kept Associated's transmission assets as robust as ever.

"The question is can coal compete with gas in the future?" said Jura. "I like our current position and the fact that we can go either way. ... It's very nice that we have these gas assets built and can fall back on them." If CO<sub>2</sub> were taxed or regulated, "I could see a fast build-out of gas plants."

For Fulks, who helped negotiate many a transmission contract, that system was one measure of Associated's success. "From its founding to today, there's never been a widespread power outage – in contrast to the coasts and Canada, but not Missouri. That's remarkable – 50 years of perfect bulk power service," he said.

#### #5 - Strategic alliances

Associated's firm ties to its strategic partners, many first formed by Gerry Diddle and Jim McNabb decades earlier, also promised a strength for the future. The relationship forged with TVA, for example, was typical.

"I have a phrase I use to describe what I want out of my employees: I want the substance and the style. Substance means you've got to deliver the results but done in such a way you feel good about it and think, 'I'd go back and do that again.' Another way to say it is results and reputation. If you have good results, then your reputation is good, and people do enjoy their association with you. That's how I think of Associated. ... They've been a good neighbor for a long time. They've given us results and done it with style," said Tom Kilgore, CEO of TVA.

#### #6 - The three-tiered system

Rounding out the strengths Associated needed for the future was the unique organizational structure that had served it so well. The three-tiered system's grassroots in the dairy farms, woodlots, ranchlands, corn fields, river towns and cotton country of its three states caught Wall Street by surprise. But it became the prize lenders

competed for.

Longtime Associated observer Mike Bollenbach of Siemens noted, "Associated is in a unique position as a cooperative with its three-tiered system that allows them to be much more efficient in decision making versus investorowned utilities, whose world is more difficult. Because of the efficiency of the Associated system, it can take advantage of opportunities when they come along. Decisions can be made in a few weeks or months."

For Jura, the system "has stood the test of time, and I think we have a very good current position that results from the way we are set up."

This three-tiered system in 2010 was rock-hard strong. The tiers were bound together by decades of decisions aimed at doing the right thing for Associated, for in doing that, the right thing also was the best thing for the six member-owners and their member-owners.

So at 50, was Associated ready to start the push for a century mark? Ameren's Tom Voss said Associated's "progressive and collaborative" leadership boded well. "They are aware of all the issues our industry faces and are very involved in shaping policies on the regional and national level. Their influence stretches well beyond [their] borders. ... Associated has a supportive board, runs low-cost, efficient power plants and is always thinking ahead and preparing for the future," he reflected

Once again, Davis of the Missouri PSC offered a final perspective on Associated's future. "The thing that separates Associated from some other large cooperatives in the country is they had the vision to build a transmission infrastructure that has been paying dividends to members for the last 30 years. They've had the vision to build baseload coal plants and generation that once again has provided low-cost power to member cooperatives, and not only lowcost but reliable. The fact that the plants are here and not trying to wheel across three states is critical. It's vision like that that is going to help serve and protect members ... for the next century," he said.

At the close of "Win-Win," Jim Jura turned to

O.B. Clark and said, "Y'know, O.B., we've got a pretty good organization here – if we don't screw it up."

At the close of 2010, Jura said, "We're going to do really well; I really believe that. The challenges are not going to change much from what they've been in the past."

Pausing to reflect, he added, "We're the highest-rated G&T in the country by some measures. It's because of the way we've positioned ourselves. That outstanding report card is saying, 'These guys are some of the best in the country.' Whether we have that in five or 10 years will depend on the board and management. But it's part of our DNA here, and so I don't worry about the future viability of Associated."

Vision. Leadership. Strategy. All were in hand in 2011. But one more factor clinched Associated's successful future: trust. Layers and layers of trust, built by handshakes and coffee talk, promises kept, deals struck. Projects completed, problems resolved, challenges embraced. Trust between plants and Headquarters, within the management circle, up and down the pecking order, extending to neighbors and partners, reaching out and back to six G&Ts and 51 cooperatives and 875,000 members at the end of the line. It added up to 50 years of tiers of trust.

#### 2010 highlights

2010, like each of Associated's previous 48 years, was chock-full of monumental events and decisions. Here was a sampling:

Wind Capital Group completed its fourth and largest Missouri wind farm, Lost Creek Wind Farm, adding 150 MW to the wind component of Associated's diversified generation mix. In total, Associated bought enough wind energy from the four farms to power about 55,000 member households.

Construction of the combined-cycle Chouteau 2 plant continued on schedule, to be completed mid-2011. A 33-mile gas pipeline to serve the plant was completed ahead of schedule and under budget. Rural Utilities Service approved a \$490 million loan for the plant, providing funding that could save as much as \$200 million in interest during the life of the 30year loan. The loan was expected to be the last RUS approved for a fossil-fuel based power plant in the country.



Lost Creek Wind Farm in northwest Missouri. Photo is property of Wind Capital Group and should not be reproduced, sold or redistributed without written approval.

The combined coal and gas fleet generated a one-month record in July of 1,977,776 MWh, with 83 percent of the energy used to serve members.

However, member load growth remained stagnant in 2010, and planners forecast an average of 1.3 percent annual growth for the next 10 years. High unemployment and stagnant housing and construction growth contributed to the decline.

Associated strengthened its reliability compliance force, bringing some employees from Engineering and Operations and Information Services into a new reliability compliance department in the Executive Division. Pat Baumhoer, general counsel and Associated's chief compliance officer, was appointed director of the department, which was responsible for compliance with all reliability requirements set by North American Electric Reliability Corp.

Associated and the G&Ts earned high marks and full compliance ratings in a critical NERC reliability compliance audit. The audit covered regulations and standards regarding reliability of the bulk electric system, specifically transmission planning, generation and system operations. Twelve technicians from the six G&Ts; another 13 Associated employees, including John Bussman and Todd Bennett in reliability compliance; Chris Bolick's system operations team; and Kevin Hopper's transmission planning team prepared documentation on seven substations and one plant that were actually audited. Likewise, Associated prepared 970 protective system elements for audit; 29 were actually selected for the audit.

Construction began on a project to add the capability to burn diesel fuel at the natural gas Dell Power Plant.

Take Control & Save added initiatives to promote energy efficiency to farmers, agribusinesses and small businesses in the cooperative system.



#### 2010 highlights, continued

Neil Adams, Associated's first general manager, died in early 2011.

Long-time Human Resources Director Dave Stump died in 2010. Rarely did a human resources director fit into this memberowned cooperative system so well, developing relationships down through the tiers. Their high regard stemmed not only from Stump's personal qualities, but also they relied on him as a professional resource.

Associated hired its first female and African-American division director, Shawn Calhoun, as director of Human Resources.

The member services department conducted a triennial survey of member satisfaction in 2010. Distribution cooperative members remained highly satisfied, scoring 82 on the

American Customer Satisfaction Index compared with the electric utility average of 75. The survey showed nearly 53 percent of members' monthly electric bills were between \$100 and \$250. Most member homes were constructed before 1990 – providing greater opportunities for energy efficiency improvements. Twenty percent of members earned \$25,000 or less.

In 2010, Fitch Ratings and Moody's Investors Service affirmed Associated's top ratings. Moody's A1 Stable rating listed drivers as predictable revenue streams based on all-requirements contracts and strong relationships with member systems; sound financial profile; and its cooperative governance structure and rate-setting autonomy that ensure timely recovery of costs. Challenges included the threat of environmental mandates to its coal plants.

Fitch's AA rating had the same drivers, plus diverse generating capacity and operational flexibility; geographic location and transmission assets; a 10-year capital plan smaller in scope than previous years' plans; and low-cost federal financing.

Standard & Poor's also issued a AA rating, with a stable outlook; challenges included forecasted additional debt of \$1.1 billion, diminished nonmember sales revenue, projected rate increases and uncertainty of carbon regulation and cost.

A project to significantly reduce mercury emissions from cyclone units at New Madrid Power Plant and Thomas Hill Energy Center continued in 2011. The idea of Todd Tolbert in the environmental, health and safety department at Headquarters, the project at first was questioned as simply too good to be true. But Tolbert's persistence paid off. Associated partnered with Goldman Sachs for the supply of refined coal and, in the process, expected to receive \$7 million to \$9 million annually through at least 2018.

**Employee excellence:** Todd Tolbert, along with Kimberly Dickerson of Thomas Hill Energy Center, Rusty Rice of New Madrid Power Plant and Lacie Shook of Headquarters spearheaded the complex initiative and earned an Excel team award for their efforts.







Clockwise from left: Former Human Resources Director Dave Stump (sidebar);

Associated staff Lacie Shook, general and compliance counsel, and Todd Tolbert, environmental analyst;

Kimberly Dickerson, environmental coordinator at Thomas Hill Energy Center; and

Rusty Rice, environmental coordinator at New Madrid Power Plant.

# **Appendix**

# 2010 highlights

Financial (in thousands)

Operating revenue	\$1,055,103
Operating expenses	952,629
Net margin	45,804
Long-term debt, excluding current maturities	1,773,982
Total assets	2,852,098

#### **Operational**

Energy sales (MWh)

Members	18,962,284
	4,306,717
Nonmembers Member revenue per kWh sold (mills/kWh)	45.75
Cost of owned generation (mills/kWh)	
Member peak demand (MW)	4,495
Net generation (MWh)	19,730,263

#### **Statistical**

661 full-time employees

9,621 miles of high-voltage transmission lines, as well as more than 850 related substations

181 transmission interconnections, 21 transmission interconnection agreements, plus business transactions with investor-owned utilities, electric cooperatives, power marketing firms and regional transmission organizations

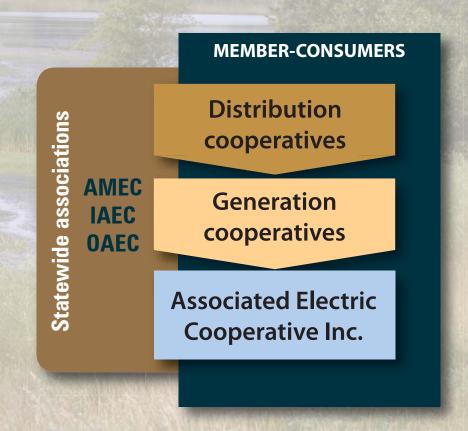
## Associated's three-tiered system

Associated Electr ic Cooperative is part of a three-tiered system united by the common purpose of serving electric cooperative members with affordable and reliable electricity.

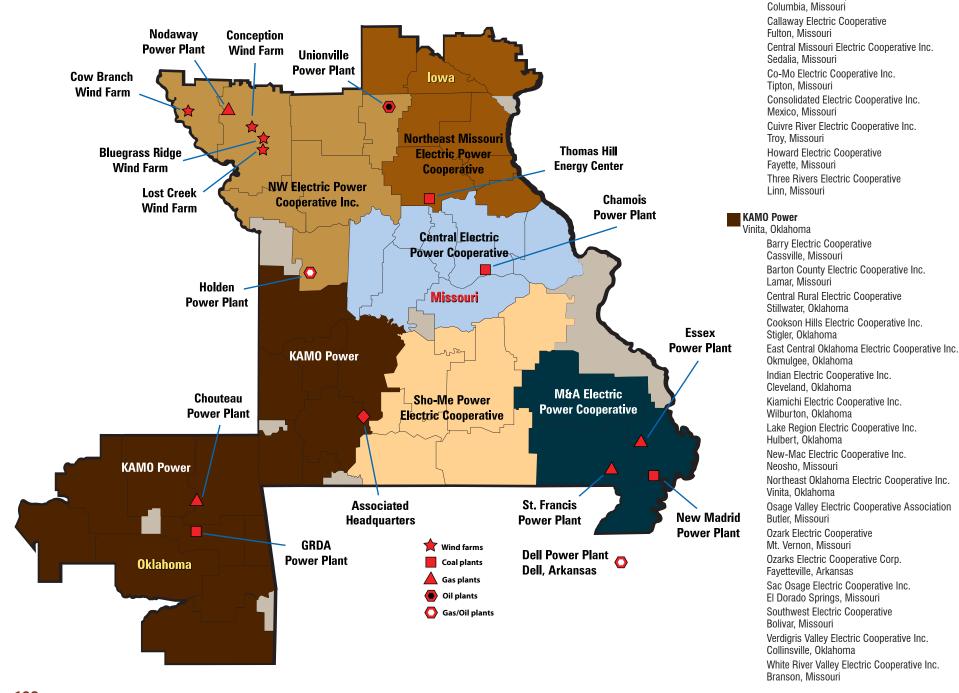
Associated is o wned by six generation and transmission cooperatives (G&Ts) that formed it in 1961 to provide the G&Ts a wholesale power supply.

These six G&Ts are owned by 51 distribution cooperatives in Missouri, southeast lowa and northeast Oklahoma. These local electric cooperatives are owned by about 875,000 member-consumers.

Our state wide organizations – the Association of Missouri Electric Cooperatives, the Iowa Association of Electric Cooperatives and the Oklahoma Association of Electric Cooperatives — are an important part of this cooperative family.



# Associated serves six G&Ts operating in three states



Central Electric Power Cooperative

Boone Electric Cooperative

Jefferson City, Missouri

#### ■ M&A Electric Power Cooperative

Poplar Bluff, Missouri

Black River Electric Cooperative Fredericktown, Missouri

Ozark Border Electric Cooperative

Poplar Bluff, Missouri

Pemiscot-Dunklin Electric Cooperative

Hayti, Missouri

SEMO Electric Cooperative Sikeston, Missouri

#### NW Electric Power Cooperative Inc.

Cameron, Missouri

Atchison-Holt Electric Cooperative Rock Port, Missouri

Farmers' Electric Cooperative Inc. Chillicothe, Missouri

Grundy Electric Cooperative Inc.

Trenton, Missouri

North Central Missouri

Milan, Missouri

Electrip Annual Tradition Cooperative Inc.

Kearnev, Missouri

United Electric Cooperative Inc. Maryville and Savannah, Missouri

West Central Electric Cooperative Inc.

Higginsville, Missouri

#### Northeast Missouri Electric Power Cooperative Palmyra, Missouri

Access Energy Cooperative Mt. Pleasant, Iowa

Chariton Valley Electric Cooperative Inc. Albia, Iowa

Lewis County Rural Electric Cooperative Lewistown, Missouri

Macon Electric Cooperative

Macon, Missouri

Missouri Rural Electric Cooperative

Palmyra, Missouri

Ralls County Electric Cooperative

New London, Missouri

Southern Iowa Electric Cooperative Inc.

Bloomfield, Iowa

Tri-County Electric Cooperative Association

Lancaster, Missouri

#### Sho-Me Power Electric Cooperative

Marshfield, Missouri

Crawford Electric Cooperative Inc.

Bourbon, Missouri

Gascosage Electric Cooperative

Dixon, Missouri

Howell-Oregon Electric Cooperative Inc.

West Plains, Missouri

Intercounty Electric Cooperative Association

Licking, Missouri

Laclede Electric Cooperative

Lebanon, Missouri

Se-Ma-No Electric Cooperative

Mansfield, Missouri

Southwest Electric Cooperative

Bolivar, Missouri

Webster Electric Cooperative

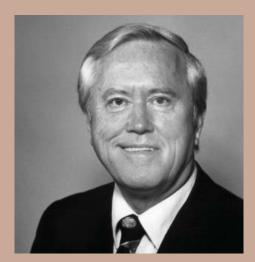
Marshfield, Missouri

White River Valley Electric Cooperative Inc.

Branson, Missouri



The senior management team of Associated Electric Cooperative includes, from left, Joseph E. Wilkinson, director of Member Services and Corporate Communications; Duane D. Highley, director of Power Production; Michael E. King, manager of internal audit; Shawn P. Calhoun, director of Human Resources; David W. McNabb, chief financial officer; Roger S. Clark, director of Engineering and Operations; Janie Corn, executive assistant; Patrick A. Baumhoer, general counsel and chief compliance officer; James J. Jura, CEO and general manager; and Ronald H. Murphy, chief information officer.



Neil Adams

## **Associated general managers**

Neil L. Adams May 1962 – June 1971

E.G. Pereboom March 1972 - August 1972

Gerald F. Diddle May 1973 - August 1991

James J. Jura August 1991 –

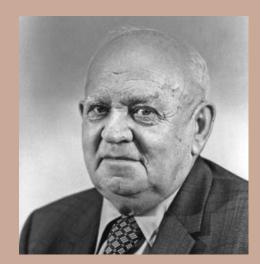
# **Board members – 1961-2011**

Name	G&T	Tenure	
M.W. (Mike) Boudreaux	Northeast	1961 – 1979	deceased
C.E. (Charlie) Boulson	Sho-Me	1961 – 1974	deceased
John E. Buck	NW	1961 – 1977	deceased
Truman Green	Central	1961 – 1977	deceased
F.A. (Fay) Martz	NW	1961 – 1971	deceased
James W. Owens Jr.	M&A	1961 – 1966	deceased
R.D. Pennewell	Northeast	1961 – 1982	deceased
Elon (Judge) Proffer	M&A	1961 – 1966	deceased
Luther A. Riddle	Sho-Me	1961 – 1987	deceased
Albert W. Schindler	Central	1961 – 1966	deceased
Eugene Smith	KAMO	1962 – 1971	deceased
Rex Dewey	KAMO	1962 – 1977	deceased
E.A. Priggel	M&A	1966 – 1973	deceased
Ray D. Buresh	Central	1966 – 1969	
Bruce Ellis	M&A	1966 – 1968	deceased
R.W. (Rudie) Slaughter	M&A	1968 – 1969; 1973 – 1990	deceased
George W. Ray	Central	1969 – 1974	
Robert E. Stagner	M&A	1969 – 2001	
J.H. (Tom) Humbert	KAMO	1971 – 1975	deceased
Curt Funston	NW	1971 – 1981; 1988 – 1989	deceased
O.B. Clark	Central	1974 – 2009	
John K. Davis	Sho-Me	1975 – 2006	deceased
Roy Matthews	KAMO	1975 – 1990	deceased
Harold F. Gray	NW	1977 – 1978	
B. Dean Sanger	KAMO	1977 – 1994	
Carl M. Herren	Central	1977 – 1990	
Richard Foster	NW	1978 – 1988	
Ralph E. Shaw	Northeast	1979 – 2004	

Continued next page

Charles C. Martin	NW	1981 – 1990	deceased
Maurice L Happel	Northeast	1982 – 2001	deceased
Larry D. Frazier	Sho-Me	1987 – 1994	
Richard L. Arnold	NW	1989 – 1996	
James K. Steele	NW	1990 – 1996	deceased
W. Arthur Carrier	KAMO	1990 – 2002	deceased
Bill Haake	Central	1990 (May-October)	deceased
James W. Abernathy	M&A	1990 – 1998	deceased
Julian Brix	Central	1990 – 1992	
Donald W. Shaw	Central	1992 –	
Gary Voigt	KAMO	1994 – 1996	
Jerry W. Divin	Sho-Me	1994 – 2008	
L. Doug White	KAMO	1996 (April-October)	
J. Chris Cariker	KAMO	1996 –	
Don R. McQuitty	NW	1997 –	
Charles C. Baile	NW	1997 – 2009	
Harold E. Jordan	M&A	1998 – 2010	
John C. Farris	M&A	2001 –	
Carl M. Thompson	Northeast	2001 – 2004	
R. Layne Morrill	KAMO	2002 –	
Douglas H. Aeilts	Northeast	2004 –	
Emery O. Geisendorfer Jr.	Northeast	2004 –	
Dan A. Singletary	Sho-Me	2006 – 2007; 2008 –	
Gary L. Fulks	Sho-Me	2007 –	
John B. Killgore	NW	2009 –	
Thomas W. Howard	Central	2009 –	
Thomas "Jake" Fisher	M&A	2010 –	

NOTE: 2011 board members in bold



John Buck

## Associated board presidential terms

John E. Buck October 1961 – February 1977

Rudie W. Slaughter March 1977 – June 1981

O.B. Clark June 1981 – June 2009

Emery O. Geisendorfer June 2009 –

# Associated relies on diverse power sources

#### 2011 resources

Associated's coal-based power plants	MW capacity
New Madrid Power Plant*	
Thomas Hill Energy Center	
Associated dispatches these coal-based units	
Central Electric Power Cooperative's Chamois Power Pl	ant 68
KAMO Power's portion of Grand River Dam Authority's I	Unit 2 198
Associated's combined-cycle, gas-based pov	wer plants
Chouteau Power Plant**	
Dell Power Plant (dual-fuel)	580
St. Francis Power Plant	501
Associated's peaking oil- and gas-based pov	ver plants
Essex Power Plant	107
Holden Power Plant (dual-fuel)	321
Nodaway Power Plant	
Unionville Power Plant (oil)	45
Additional contracted power sources	
Hydroelectric peaking power (SWPA)	478
	ailburgathin an
Total capacity	5,895
A company to the control of the cont	

\*The city of New Madrid owns the 600-megawatt Unit 1, which is operated by Associated under terms of an agreement with the city.

Associated has long-term purchase agreements to buy Missouri wind energy, which is not part of its capacity.

Associated also counts its Take Control & Save energy efficiency program as an important part of its resource mix.





From top: Roger G. Neumeyer, plant manager, New Madrid Power Plant; and

Kevin L. Murphy, plant manager, Thomas Hill Energy Center.

<sup>\*\*</sup> Includes 540-MW Chouteau 2 expected to be on line mid-June 2011

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#### About the author

Jennifer Ailor has been a rural electric cooperative member most of her life, having grown up on a farm in Linn County in north Missouri and now living in rural Christian County in the Ozarks. After teaching high school journalism, Ailor moved into hospital public relations, edited the magazine received by the 30,000 employees of telecommunications giant United Telecom (now Sprint) and wrote ads for a manufacturing company. Much of her career, however, was spent in public accounting as the director of communications for BKD, one of the country's largest CPA firms. One of her projects there was to write the history of the firm.

Now, through Ailor Communications, she helps promote the use of renewable energy in Missouri through Ozarks New Energy as coordinator of its conferences. She also teaches writing at Missouri State University; writes extensively for Associated's corporate communications department; has published in Rural Missouri,

Ozarks Farm & Neighbor and other magazines; and manages business communication projects for other clients. Telling the story of Associated's last 15 years took her by phone and car to interviews with more than 50 people, including Associated's management team and staff, board members and strategic partners. "What impressed me was the consistency of the message," she said. "The respect, the trust run deep."

# 世1980s



In the 1980s, Associated improves productivity of mines and equipment acquired from Peabody.

#### **Early 1980s**

General Manager Gerry
Diddle and O.B. Clark,
board president, hammer
out the details of the board's
committees, freeing the
board from day-to-day
operational decisions and
creating a more balanced
and trusting power structure
within the board.

#### 1981, March

A new contract with Southwestern Power Administration gives Associated virtual control over several hydropower projects; it is replaced in 2001 with a contract that relieves Associated of that control in return for 478 MW of capacity and 1,200 guaranteed hours of peaking energy.

#### 1981

Associated completes new line from Thomas Hill 345-kV Substation to the Kingdom City 345-kV Substation to provide outlet transmission capacity for Thomas Hill Unit 3. It's one of many transmission projects built in the 1980s.

### 1982, February

Associated terminates the Black Fox Nuclear Project following the incident at Three Mile Island that changes the feasibility of building a nuclear plant in the United States.

#### 1982

The last of Associated's coal-fired units, the 670-MW Thomas Hill Unit 3, goes on line at a cost of nearly \$508 million.

#### 1982

Associated fully computerizes its payroll, accounting and materials management functions when it installs a Prime computer system.

#### 1982

Associated completes a 28,000-square-foot addition to Headquarters with a high-security dispatch and computer facility offering several improvements.

#### 1984

The Clarence Cannon
Dam, a 58-MW peaking
hydropower facility on Mark
Twain Lake, goes on line.

#### 1989

Looking ahead to the requirements of the 1990 Clean Air Act Amendments, Associated forms a Clean Air Act contingency fund to help pay for changes at its power plants.

#### 1989

Associated's considerable investment in its mining operation early in the decade – three draglines, a coal washing plant and haul trucks – pays off with the cost of coal per million British thermal units of \$1.44, compared with \$1.53 in 1980.

# 世1990s



Associated employees at Thomas Hill Energy Center in 1994 hoist a shaker used on top of a rail car to unload bottom-dump rail cars from the cooperative's mines before Associated converts to low-sulfur coal from the Powder River Basin in Wyoming.

#### **1991, August**

James J. Jura becomes general manager.

## 1992, May

The 102-mile, 345-kV MINT line is dedicated, a joint project of Associated and six other utilities in Missouri, lowa and Nebraska.

## 1993, February

The Clean Air Act
Amendments of 1990 lead to
Associated's exiting the coal
business, closing its mines
and beginning reclamation of
12,000 acres of mined land.

## 1995, January 1

Associated cuts its rates by an average of 17 percent to a level lower than any since 1981, earning it the second lowest wholesale electricity rate in the nation.

#### 1995, December

The conversion to low-sulfur coal at both Thomas Hill and New Madrid power plants is completed, reducing emissions of sulfur dioxide 90 percent.

#### 1996

Associated's first formal bond ratings earn it an AA- from Fitch Investors Service LP, A1 from Moody's Investors Service and AA from Standard & Poor's Ratings Service, opening up new financing markets for the cooperative.

#### 1996

Associated takes advantage of the Federal Energy Regulatory Commission's Order 888 and the Energy Policy Act of 1992 by creating a power marketing team.

#### 1996, October

Associated announces a partnership with PanEnergy to construct its first natural gas-powered plant:
St. Francis Power Plant, a 250-MW, gas-based power generation facility, dedicated in September 1999. Its second 250-MW unit is completed in March 2001.

#### 1997, October

Associated announces it will leave Southwest Power Pool, which has been approved to operate as a regional transmission organization. The move confirms Associated's intent to control its own transmission.

## 1997, November

KAMO Power selects Associated as the power supplier for its nine electric cooperatives in northeast Oklahoma.

### 1999

The first of Associated's gas "peakers," the 107-MW Essex Power Plant and the 182-MW Nodaway Power Plant, begin operations, to be followed in 2002 with the 321-MW Holden Power Plant.

# **≝2000s**



Bluegrass Ridge Wind Farm in northwest Missouri.

#### 2000, February

Selective catalytic reduction equipment, designed to reduce emissions of nitrogen oxides by about 93 percent, on New Madrid Unit 2 becomes operational; Unit 1 follows in January 2002.

#### 2000, June

The 522-MW combinedcycle Chouteau Power Plant begins operations, followed by the 540-MW Chouteau 2 Power Plant in 2011.

### 2005, August 15

Associated purchases partially constructed 580-MW, combined-cycle natural gas-based power plant in Dell, Ark. After construction is completed, the plant begins operating in June 2007.

#### 2006, April

Associated's first wholesale power supply rate increase in 20 years takes effect, enabling the cooperative to meet a projected \$1.7 billion in costs for new generation and environmental controls.

# 2007, September 17

Bluegrass Ridge Wind Farm, Missouri's first utility scale wind farm, is dedicated, followed by Cow Branch and Conception wind farms in 2008 and Lost Creek Wind Farm in 2010, all projects Associated helps make possible by providing transmission and agreements to purchase all the power generated for 20 years.

## 2008, February

Associated's board decides to delay indefinitely plans to build a 660-MW coal plant near Norborne, Mo., in Carroll County, citing increasing construction costs and uncertainties about carbon regulations.

#### 2008, March 7

Associated's "Take Control and Save" energy-efficiency program debuts, building on the distribution cooperatives' longtime energy efficiency efforts.

#### 2008, December

Associated finishes installing selective catalytic reduction equipment on Thomas Hill Energy Center's three units, enabling a 90 percent systemwide reduction of nitrogen oxides emissions by the Jan. 1, 2009, Clean Air Interstate Rule deadline.

#### 2009, Jan. 26-28

Associated and more than 3,300 line workers respond in record time to a historic ice storm that severely damages high-voltage transmission and distribution facilities in southeast Missouri; within 17 weeks, Associated is ready for summer's peak demand.

## 2010, June

U.S. Department of Agriculture Rural Utilities Service approves a \$490 million loan for the 540-MW Chouteau 2 gas plant, providing funding that could save as much as \$200 million over the 30-year loan.

## 2010, September

Associated and the six G&Ts successfully meet the requirements of all 47 standards examined in the North American Electric Reliability Corp.'s audit, the result of diligence by the two tiers in dedicating more resources to reliability compliance.

#### 2010, November

Associated joins other
Missouri utilities and Gov. Jay
Nixon in urging legislative
support for an early site
permit for a second nuclear
power plant proposed by
Ameren Missouri.

# **Associated Electric Cooperative Inc.**

A Touchstone Energy® Cooperative



