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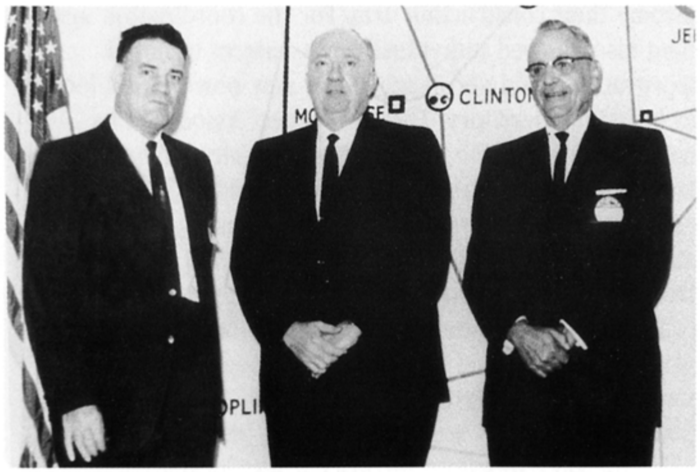
The Range Bulls

Not everybody called them range bulls, the six G&T managers who had given up much autonomy in order to create Associated and who were reluctant to give up any more.

But, inevitably, right from the start, some of them began acting the part – particularly Mike Boudreaux, Truman Green and Fay Martz – snorting and stomping and bellowing over who would build the first big power plant under the Associated flag.

Fay Martz's suggestion that Neil Adams be hired away from SWPA to become general manager had been unanimously approved by the



Truman Green, Mike Boudreaux and Fay Martz, left to right, each agrees yielding some autonomy to Associated will benefit Missouri's rural cooperatives, but they are reluctant to give up control of generating facilities. When time comes to build the first power plant, the three board members butt heads over where the plant should be located and which G&T should operate it.

12-member board of directors that included each G&T manager. Most observers say that with Adams' unique combination of experience and talents there could not have been a better choice for the Associated start-up job. But the way the range bulls set him up in business – in a solitary hotel room in Springfield without even a secretary and with a staff that totaled only five after the first full year – it was clear the managers intended to retain as much power as possible. That they had to pull in their horns early on was more their own doing than Adams'.

"In fact," says Bob Stagner, M&A's longtime manager who happens to have the longest service on the Associated board, "one reason Associated became so strong, itself, was the unwillingness of any one of the six G&Ts to give up power to any other of the six."

The way the coordination agreement was written, Associated could be used by the six G&Ts that owned it to build power plants as well as to do many other useful things. But at the outset, none of the G&T managers and other incorporators really expected the new organization to become their construction arm. For the coordination agreement also allowed individual G&Ts, subject to board approval, to build and manage any new power plant located in its own territory. They did expect Associated to arrange the financing and to serve as a clearinghouse – to plan the needed base-load power plants and transmission lines; to sell the power from the plants; to set rates sufficient to pay for the facilities and for any power bought from others, including the peaking power from SWPA; to keep the books; and to do the other paperwork. But once the size and type and site for each new power plant was chosen, the managers and the entire board, for that matter, initially expected it would be built and operated by the G&T in whose territory it was located.

With his limited role clearly understood, Adams was allowed to hire a handful of key people and to engage a consulting firm to help him and his youthful new chief engineer, McNabb, prepare a specific proposal for the

From left, board members Charlie Boulson, Luther Riddle, Truman Green, Fay Martz, Rex Dewey, and in back, right, Bob Stagner meet with Gov. Warren Hearnes in 1969.

"One reason Associated became so strong, itself, was the unwillingness of any one of the six G&Ts to give up power to any other of the six."

Bob Stagner

board. The recommendation for the first big cooperative power plant turned out to be a coal-fired unit with 180 MW of capacity at the tiny town of Thomas Hill (population 25) near Moberly in north-central Missouri. The Peabody Coal Co. had agreed to develop the coal at that site and, in the meantime, to supply the proposed plant from an existing mine 8 miles or 9 miles to the north. A question arose as to specific location. Should it be some 40 miles away on the Missouri River for readily available cooling water or at Thomas Hill where the coal was and where the mine later would be located, but where a lake would have to be built for cooling water? Economics strongly suggested the coal site. That location won out over several other proposals, including one advanced by Mike Boudreaux, manager of Northeast G&T, who wanted to build diesel units all over the state of Missouri.

While the site-selection process was under way, Clarence Cannon, then chairman of the powerful Appropriations Committee of the U.S. House of Representatives, didn't like the stories he was hearing to the effect that other suitable sites might beat out Thomas Hill. Adams was in Fay Martz's office one day when Cannon called to ask: "What's this business about that new power plant? How come we're not going to locate it at Thomas Hill? That's my area. Those people want it and they deserve it and that's where it ought to be." And that's where it went – and where it almost certainly would have gone, anyway, without Cannon's intervention, according to Adams.

The site was thought to be in the service territory of Central G&T headed by Truman Green, but also known to be very close to the dividing line between Central and Northeast G&T, managed by Mike Boudreaux. As Adams got closer to making his presentation to the board, he felt pretty good about the seeming consensus. Adams recollected: "Everybody thought, 'This site is in Truman's territory and he's got that power plant over at Chamois, and he's operating that, and ol' Truman, he's a pretty smart guy; he knows how to do this.' So the rest of them say, 'OK, if Truman's going to do it, that's OK.'"

Then came the day of the board meeting. Mike Boudreaux walked in carrying a roll of maps.

"What are you going to do with all those maps?" Adams asked.

"I'll show you," Boudreaux growled. He unrolled the maps which proved the power-plant site actually to be on his side of the boundary between Northeast and Central G&Ts.

Fay Martz of NW G&T stood up and announced: "I'll tell you one thing, NW is leaving Associated as of right now if you put that plant there and Mike Boudreaux operates it." Not especially surprised, the rest of the board listened as Martz looked Boudreaux in the eye and said: "Mike, you're not going to operate that plant and I can tell you that right now." Martz and some of the others were smarting because of the concessions made to Northeast in the form of "secondary credits" at the time Associated was formed. Martz also was outraged by the idea of Boudreaux as manager of the smallest of the six G&Ts trying to run the whole show.

Adams added an aside to the controversy, another episode involving Clarence Cannon. When Adams was with SWPA, Doug Wright called him into the office one day to say Cannon was on the phone. "Of course, we all knew who Clarence Cannon was," Adams chuckled. "We knew what politics was too, and we knew who had to approve our appropriations. Doug explains: 'Mr. Cannon says that Northeast is the only G&T in the United States that's in the red. Mr. Cannon wants us to get some hydropower in there to alleviate that situation. You get on the phone here and talk to Mr. Cannon.'"

Adams asked, "What can we do to help you, Mr. Cannon?"

The congressman replied, "Well, this is a real embarrassment to me. I live up there, you know, and it's the only G&T in the United States that's not making any money and


Missouri State Archives

Clarence Cannon, 1951

"Of course, we all knew who Clarence Cannon was. We knew what politics was too, and we knew who had to approve our appropriations."
Neil Adams

can't pay for itself. It's my understanding that you're down there almost giving that power away. I also understand that you can make an interconnection with Central G&T and that the two can be interconnected with a transformer, but that nobody can find a transformer. Now, Mr. Adams, I've heard a lot about you and I have a lot of confidence in you, and I just know that you can find a transformer."

Adams said, somewhat feebly, "Wait a minute. ..."

The congressman said, "Let me have Doug back." Cannon said to Wright, "Well, I made a deal with Neil; he's going to take care of that for us."

Adams concluded: "You better believe we found a transformer, and we started delivering hydropower at the 'dump' power rate of 1.5 mills per kilowatt-hour to Mike Boudreaux."

That was back before Associated was formed, when Northeast – lying entirely outside the SWPA watershed – was the only G&T in Missouri without the necessary transmission ties to avail itself of cheap SWPA power. Accommodating Clarence Cannon was another special concession to Northeast that still stuck in the craw of Martz and some of the other board members.

Boudreaux was not deterred. "That's not what the contract says," he argued. "It's in my area and I operate it."

'Round and 'round they went, several months passing without the issue getting settled. Meanwhile, REA in Washington was getting nervous about the supply to the distribution cooperatives and pushing for a decision as to which builder it would be lending construction money. For that matter, REA officials were not especially enthusiastic about any of the six G&Ts' building and operating the plant – not even when taking into account that the G&Ts now would be pooling their financial strength through Associated.

As the stalemate dragged on, Martz called Adams: "Neil, could you build that plant?"

Adams said, "Fay, I never built a power plant in my life, but I imagine we could hire someone who could build it."

Martz replied: "Well, I think maybe Associated is going to have to take this over."

Adams said: "You know what the deal was."

Martz replied, "I don't give a damn what that contract says. If you want me to stay in it, this is the way we're going to have to do it."

Adams remembers, "We all got together again and after a lot of soul searching and swearing and cussing decided to go to REA with this approach."

It was only then that they learned REA had felt all along that Associated was the one that should build and operate the first, and all subsequent, cooperative power plants in Missouri. Gerry Diddle says with wry understatement, "I don't think all the managers thought this was the best idea." He added: "If Boudreaux had known after the decision with respect to Thomas Hill No. 1 that Associated would wind up owning all the cooperative generation in the state of Missouri, he would have walked out of the boardroom and never come back. Probably Truman Green too."

The selection of an engineering firm was not much easier. Adams went to Chicago to meet with Sargent and Lundy, one of the big companies there. He ran into an attitude. "Here's this guy Neil Adams who never built a power plant in his life; he's with the cooperatives in Missouri and they don't know what the hell they're doing." So Adams went to Black & Veatch, the firm for which he worked right out of college. They said they were sorry, but they had gotten out of the cooperative business and had no intention of getting back into it. Then Adams got a call from the firm of Burns & McDonnell (B&M) expressing interest. B&M at the time was not a big firm, but it wanted the job and it met one of the board's criteria that no engineering firm working for any of the six G&Ts would be eligible. The firm performed ably and has been the architect for every plant Associated has built since.

REA officials were not especially enthusiastic about any of the six G&Ts' building and operating the plant – not even when taking into account that the G&Ts now would be pooling their financial strength through Associated.

Acquiring the 6,200 acres necessary for the power plant – mainly for the man-made lake that provides cooling water – presented a challenge. Associated had no land acquisition staff or anyone experienced in that work. Ed Jehle volunteered. He spent weeks upon weeks at Thomas Hill bargaining with the landowners. He returned to Springfield each weekend to catch up on his regular job of keeping the Associated books. He acquired the land in record time, without the need for a single condemnation procedure, but with a few "strange encounters."

In one case, he had to move a cemetery. In another, he had to negotiate with a hermit who had just been released from jail for shooting a road-crew surveyor. "The fellow could not read or write," Jehle, now a lumber dealer in Summersville, remembered. "I had a terrible time trying to make him understand what we wanted. Then one day I took a roll of $20 bills out of my pocket, and he understood that and put his 'X' on the line." Jehle rarely had to carry cash to complete acquisitions –

Associated checks usually were accepted. "We paid a fair price," he recalled, "about $200 an acre; maybe that was a little more than the land was worth, but nobody got rich off the deal and we accomplished our purpose in about six months."

Adams interviewed a number of people before choosing TVA's Ernie Baker to manage construction and operate the plant. It was a good choice. Everything went smoothly. The plant got built on time and within budget. "It turned out to be an excellent project," Adams recalled. "Otherwise, Associated probably would not be in business today. Mike would keep trying to find something wrong with the plant, but he couldn't." By the time it was finished in 1966, the cooperative loads were growing so fast Associated had to start building the second unit at Thomas Hill, a coal-fired 303-MW unit. Missouri had other potential sites with access to coal, which Associated looked into. But the coal would have been more expensive to mine than at Thomas Hill. By this time the grumbling had not ceased, but there was no argument as to who would build Unit 2. Still, some of the range bulls thought Neil Adams was waving a red flag.

The new Associated responsibility was to purchase and generate and sell electric power, integrate it all and provide the lowest-cost power. In the mix were the small generating plants built previously by some of the G&Ts. NW had two 20-MW units, Central one with 48 and another with 18. M&A down in the bootheel had some diesel units, and Northeast had some diesel and small steam units. When Adams and McNabb ran all the numbers, it was clear the small generators at Northeast and M&A should be shut down – it cost more to generate power at those units than Associated had to pay for power purchased from other sources.

"Word came back to me that Mike had said he would crawl all the way to Springfield if that's what it would take to get me fired."

Neil Adams

Boudreaux, faced with having to lay off employees, "started raising hell" with Adams. "People are going to starve," Boudreaux said. Adams said he would take it up with the board. "Naw, you can do it yourself," Boudreaux argued. No, insisted Adams, it was up to the board. At the next board meeting, one of the members spoke up, "Well, Mike, maybe the thing to do is just phase those people out and give them some decent severance pay." That is what eventually was done. The plant is still in mothballs.

On top of all their other differences, this did nothing to help Adams' relations with Boudreaux. "Word came back to me," Adams recalled, "that Mike had said he would crawl all the way to Springfield if that's what it would take to get me fired." Adams said that didn't bother him "because we were doing what we were supposed to be doing." Eventually, Boudreaux got his wish when the board, by consensus, asked for and got Adams' resignation. But that did not happen until Martz – Adams' powerful champion on the board – was sidelined with an illness that proved fatal and was not present to fight for Adams' retention.

A peculiar conflict-of-interest issue interrupted Adams' tenure as general manager early on and left Jim McNabb handling Associated's dealings with SWPA for the better part of a year – peculiar in part because Doug Wright had had that issue examined before encouraging Adams to take the job.

Adams was in the offices of his consulting engineers one day working on Thomas Hill plans when he got a call from one of his former supervisors, Floyd Conway, the chief engineer for SWPA: "Neil, I've got bad news for you. We just got a ruling from the Justice Department that you're in conflict of interest, and I can no longer meet with you; we can

Still, some of the range bulls thought Neil Adams was waving a red flag.

no longer have any conversations with you or deal with you in any way on our Associated contract. You're going to have to hire someone else to take over that obligation." Adams while employed by SWPA had negotiated the contract with Associated and helped Associated get federal financing from REA. Now that he was employed by Associated, the Justice Department had ruled he could not deal with the federal agency he had worked for so recently. There had been various conflict-of-interest laws on the books when Adams took the job, but none that caused him or Wright or anyone else concern about propriety. But now there was a new law that prompted the Justice Department's action. It seemed a curious action that friends of Adams think may have been engineered by a former SWPA associate harboring some unspecified grudge. Adams called the Associated board of directors together and got the members to agree that Jim McNabb would take over all dealings with SWPA while Adams went to Washington, D.C., to retain a lawyer, who the board decided should be paid by Associated.

The lawyer, Northcutt (Mike) Ely, who later represented Associated in the credits lawsuit and did a great deal of other legal work for Associated, filed suit against Attorney General Robert F. Kennedy. It contended that a law passed subsequent to Adams' employment could not be applied retroactively. The case dragged on for almost a year before Adams was ruled eligible to resume his Associated duties. He still has the letter signed by Secretary of the Interior Stewart Udall advising that the Justice Department had determined "... no criminal action against Mr. Adams could be feasibly based on his transacting business with the Southwestern Power Administration or the Department of the Interior in his capacity as general manager of Associated Electric Cooperative Inc." Secretary Udall's letter went on, "Accordingly, all restrictions on your personal participation ... are removed."

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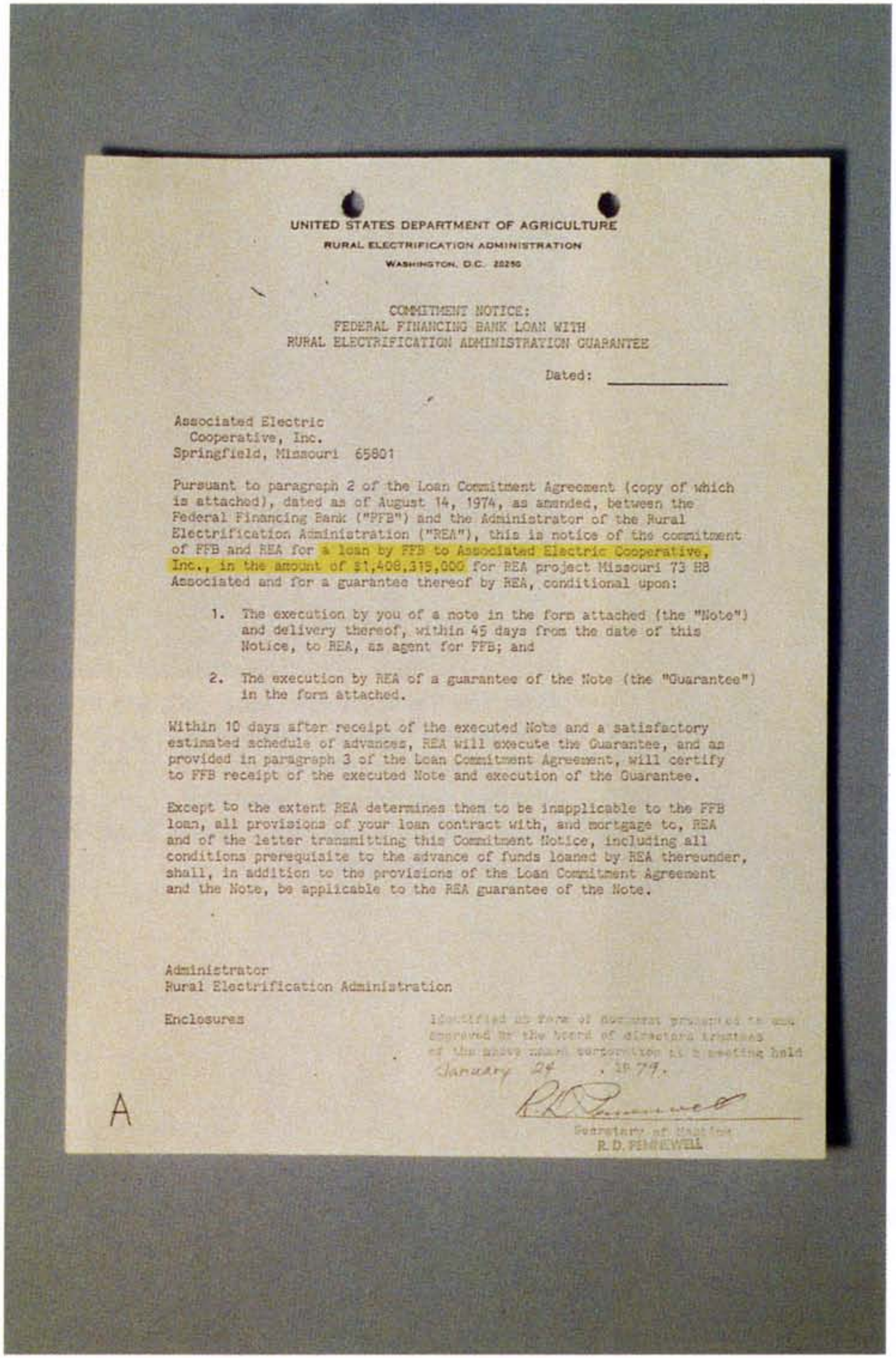


UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL ELECTRIFICATION ADMINISTRATION
WASHINGTON, D.C. 20250

COMMITMENT NOTICE:
FEDERAL FINANCING BANK LOAN WITH
RURAL ELECTRIFICATION ADMINISTRATION GUARANTEE

Dated: ____________

Associated Electric
Cooperative, Inc.
Springfield, Missouri 65801

Pursuant to paragraph 2 of the Loan Commitment Agreement (copy of which is attached), dated as of August 14, 1974, as amended, between the Federal Financing Bank ("FFB") and the Administrator of the Rural Electrification Administration ("REA"), this is notice of the commitment of FFB and REA for a loan by FFB to Associated Electric Cooperative, Inc., in the amount of $1,408,315,000 for REA project Missouri 73 H8 Associated and for a guarantee thereof by REA, conditional upon:

1. The execution by you of a note in the form attached (the "Note") and delivery thereof, within 45 days from the date of this Notice, to REA, as agent for FFB; and

2. The execution by REA of a guarantee of the Note (the "Guarantee") in the form attached.

Within 10 days after receipt of the executed Note and a satisfactory estimated schedule of advances, REA will execute the Guarantee, and as provided in paragraph 3 of the Loan Commitment Agreement, will certify to FFB receipt of the executed Note and execution of the Guarantee.

Except to the extent REA determines them to be inapplicable to the FFB loan, all provisions of your loan contract with, and mortgage to, REA and of the letter transmitting this Commitment Notice, including all conditions prerequisite to the advance of funds loaned by REA thereunder, shall, in addition to the provisions of the Loan Commitment Agreement and the Note, be applicable to the REA guarantee of the Note.

Administrator
Rural Electrification Administration

Enclosures

January 24, 1979.

R. D. PENNEWELL

A

THE 1970S IN PHOTOGRAPHS

"The decade of the '70s was a most difficult period for the electric utility industry," General Manager Gerry Diddle wrote in the 1979 Annual Report. "It was replete with a multitude of new and changing government regulations, increasing inflation and high interest costs."

It also was a time of tremendous growth in the use of electric energy by member systems. Kilowatt-hour sales increased 236 percent and kilowatt-hour demand increased 220 percent, Diddle said.

However, that trend slowed near the end of the decade when the nation faced a severe energy crisis.

Major construction projects also marked Associated's second decade. New Madrid Units 1 and 2 went on-line, increasing Associated's generating capacity from 483,000 kilowatts in 1970 to 1,728,000 in 1979.

Dollars expended on new construction projects in 1975 and 1976 totaled $148.8 million – good examples of the heavy investments to provide generation and transmission facilities for the next 10 years, Diddle wrote. The two-year expenditure of capital funds was the largest to date.

Other watermarks of the decade:

- The investment in facilities (original cost) grew from $63 million in 1970 to $519 million in 1979.
- In 1979, total operating revenues amounted to $169.7 million. Net margins amounted to $14.7 million, and Associated gave its members a wholesale power cost reduction of $5.3 million. In 1970 revenues were listed at $30.8 million.
- Kilowatt-hour sales were 10.6 billion in 1979, 4.9 billion in 1970.
- Peak demand in 1979 was 1,490,000 kilowatts, 668,449 in 1970.
- Associated employed 102 people in 1970, increasing its work force to 750 by 1980 with the addition of the New Madrid Power Plant and the formation of the Fuels and Mining Division.
- Associated's customers also increased during the decade; the number of meters served grew from 292,015 in 1970 to 406,600 in 1980.
- Reversing the trend of the '60s, the cost to members increased from 6.34 mills per kWh in 1970 to 21.65 mills per kWh in 1979.
- The cost of coal followed the same pattern, increasing from $5 a ton in 1970 to about $25 a ton in 1979. Controlling costs was one reason for Associated's purchase of the Bee Veer and Prairie Hill mines. Securing low-cost energy also is the reason Associated became a partner in the Black Fox Nuclear Project.

While New Madrid Unit 1 is still under construction, Associated conducts a ceremony in October 1970 to energize St. Jude Industrial Park where Noranda Aluminum will operate its new plant. From left are Neil Adams, general manager, Ernie Baker, plant superintendent, and Sen. Stuart Symington, who closes the circuit breaker, allowing Associated to deliver power from its Thomas Hill plant to the southeast Missouri site.

Associated President John Buck, left, and General Manager Neil Adams conduct ceremonies Oct. 17, 1970, when Associated energizes St. Jude Industrial Park and Noranda Aluminum Inc. with power from Thomas Hill while New Madrid Power Plant is under construction.

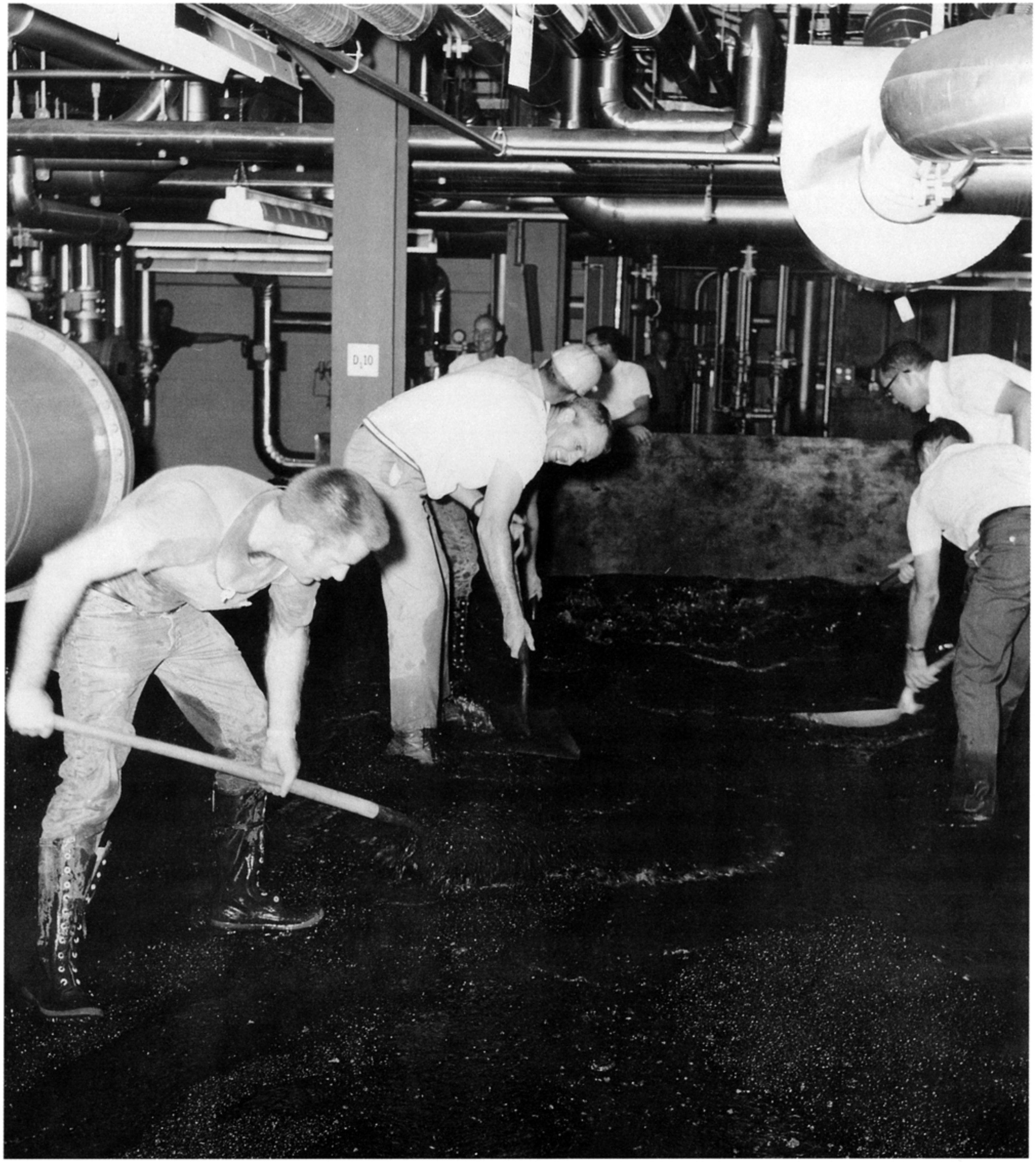
Discussing the first annual inspection of the Thomas Hill Unit 2 turbine generator, from left, are Bill Hicks of Westinghouse, Associated General Manager Neil Adams and Plant Manager Bill Muckelrath.

Associated General Manager Neil Adams poses on the Thomas Hill Unit 2 turbine floor.

Thomas Hill and Northeast employees work several days to move a step-up transformer away from the plant and prepare it for shipment to the manufacturer for repairs. Despite their efforts, the 162 tons of dead weight will not budge using a winch truck, pulleys and a Caterpillar dozer. Finally, the coal yard dozer is used to load the transformer onto a specially designed railroad car Oct. 30, 1970. Driving the dozer is Al Rustemeyer. Also pictured are Bill Muckelrath, second from left; Paul Smith, second from right; and Enis Colley, far right.

New Madrid Unit 1 rises on the shore of the Mississippi River Christmas Eve 1970 in this view to the southeast. Noranda Aluminum is in the rear.

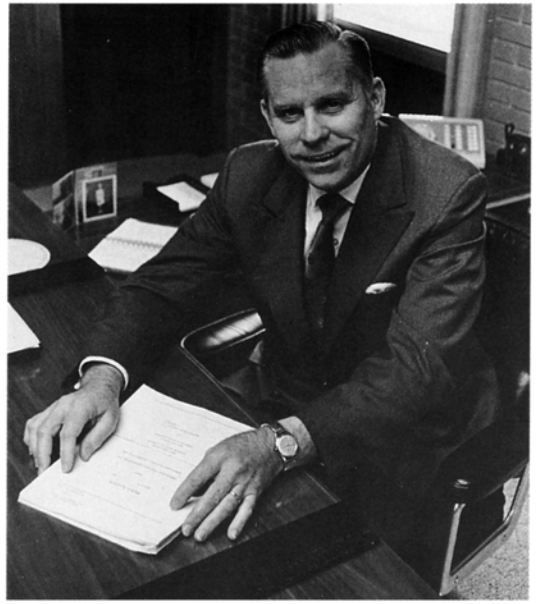
Thomas Hill Plant Manager Bill Muckelrath and Associated General Manager Neil Adams visit the control room of Unit 2.



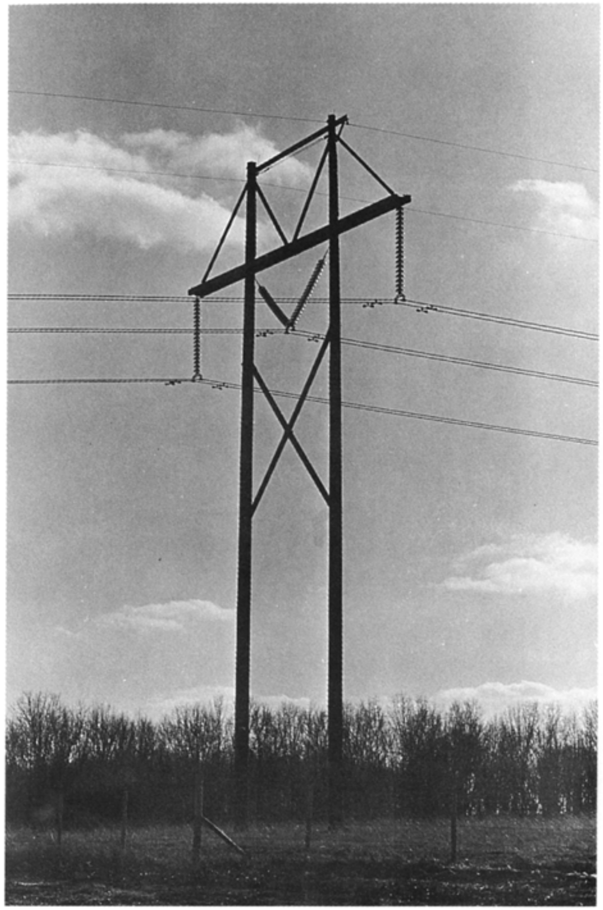
Trying to keep Unit 2 on-line, employees shovel slag off the basement floor at Thomas Hill. Slag tanks had reached capacity, forcing a decision to shut down the unit or empty the tanks. To avoid taking the unit out of service in September 1970, slag is sluiced directly onto the basement floor instead of being diverted through long pipelines to the slag ponds. Shoveling, on left, are Jerry Teter and Ed Vroom. On the right are Paul Smith and Bill Muckelrath. In the background, George Walbrink, left, and Jesse Burton watch.

In October 1971 contractors install equipment for Unit 1's control room at New Madrid.

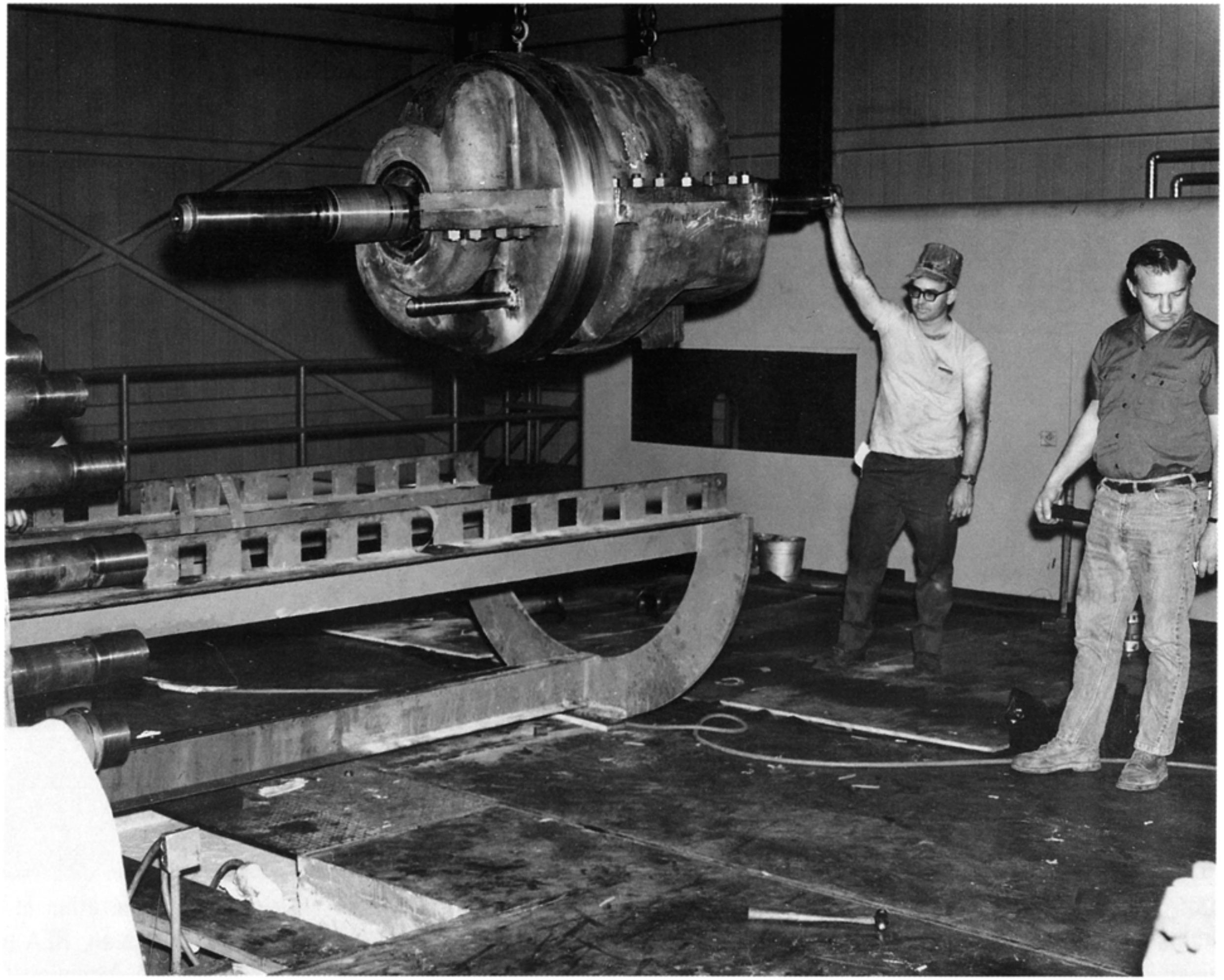
Oct. 31, 1973, one of the largest single checks ever released by the Rural Electrification Administration is presented to Associated. From left, are Justice Department attorney assigned to REA Henry Freedman, REA engineer Paul Jones, unidentified, AECI President John Buck, AECI financial manager Ed Jehle, REA Administrator David Hamil, AECI General Manager Gerry Diddle, AECI Vice President Rudie Slaughter, Chuck Gill, unidentified, and first Governor of National Rural Utilities Cooperative Finance Corp. J.K. Smith.



Eugene Pereboom is Associated's general manager for only a few months in 1972.

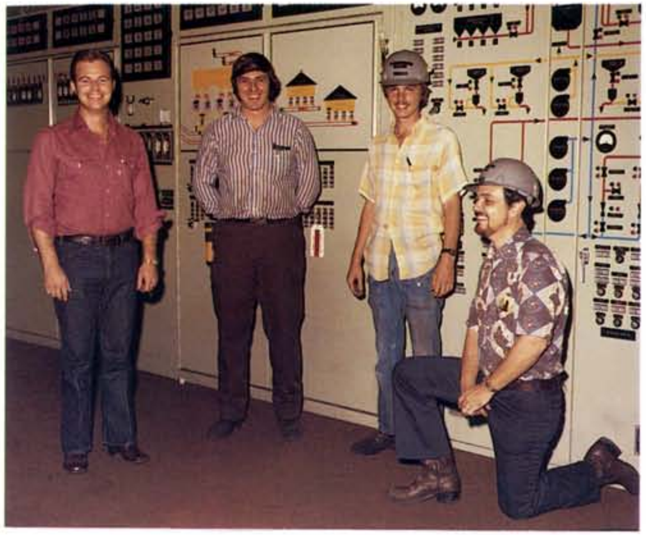


The 1970s become the era of extra-high-voltage transmission construction for Associated. The first Rural Electrification Administration borrower to build a 345-kV line, Associated connects New Madrid with Lutesville in 1970.



Chuck Walser, left, and Bob Boots, remove a boiler feed pump from Thomas Hill Unit 2 in November 1973. In 1996, Walser works as a maintenance planner at Thomas Hill and Boots is operations superintendent.

Seven years of expansion change the Thomas Hill Power Plant, photographed in late 1973.



New Madrid Power Plant's first unit went on-line in 1972. The E Shift, pictured in 1973, is one of the first groups of operators. From left are Jerry Neighbors, control room operator, Larry St. Mary, assistant control room operator, Mike Barnes, auxiliary operator, and Robert Street, shift supervisor.

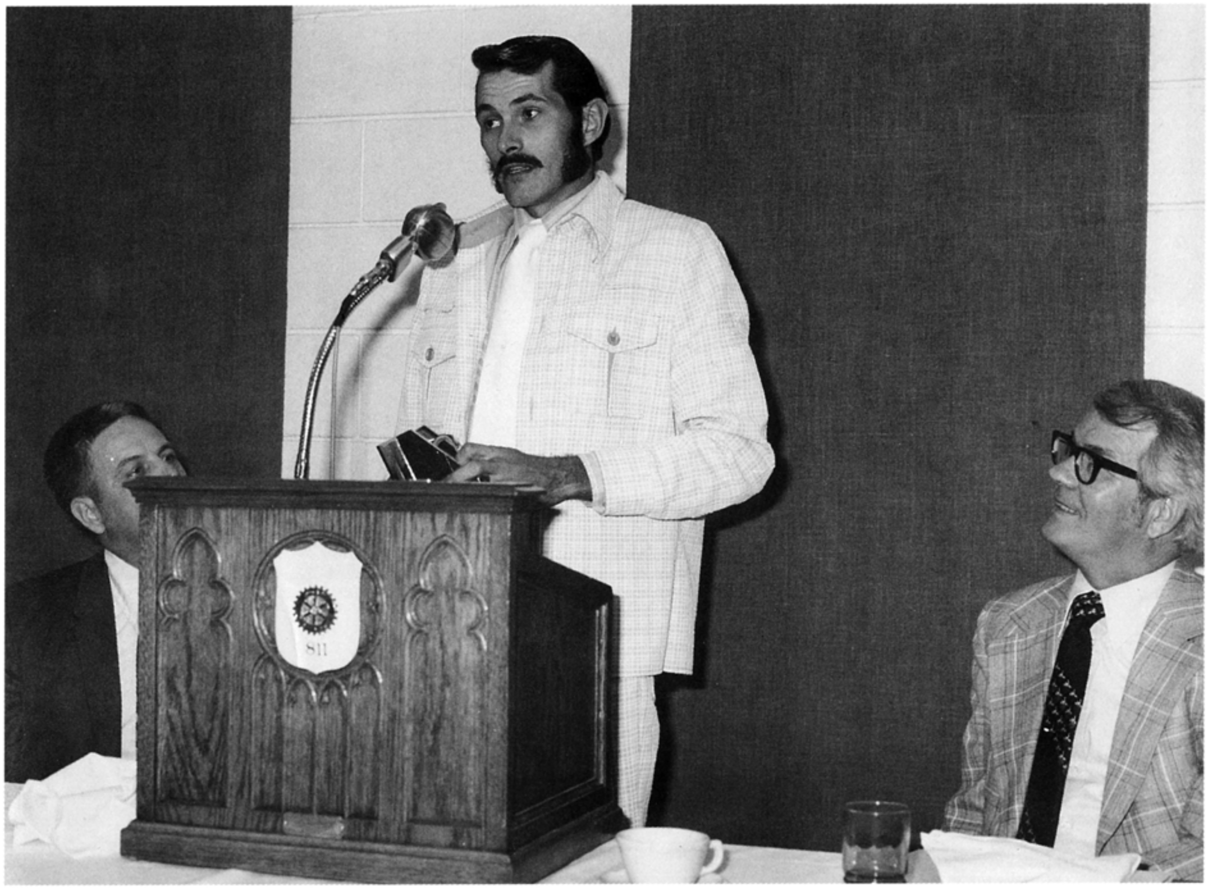
With the Mississippi River as a backdrop, New Madrid Unit 2 construction continues with this coffer dam July 10, 1974.

The 600-MW New Madrid Unit 1 goes on-line in October 1972. This photograph was taken in December 1973.

This 345-kV St. Louis-to-Tulsa line, also called the MO-KAN-OKLA line, built in 1974, is the first of Associated's interregional extra-high-voltage ties.

In the mid-1970s Associated staff, from left, Jim McNabb and Gerry Diddle, visit with Intercounty General Manager James I. Boatman, one of many cooperative leaders across the state to hear presentations about future financing for Associated.

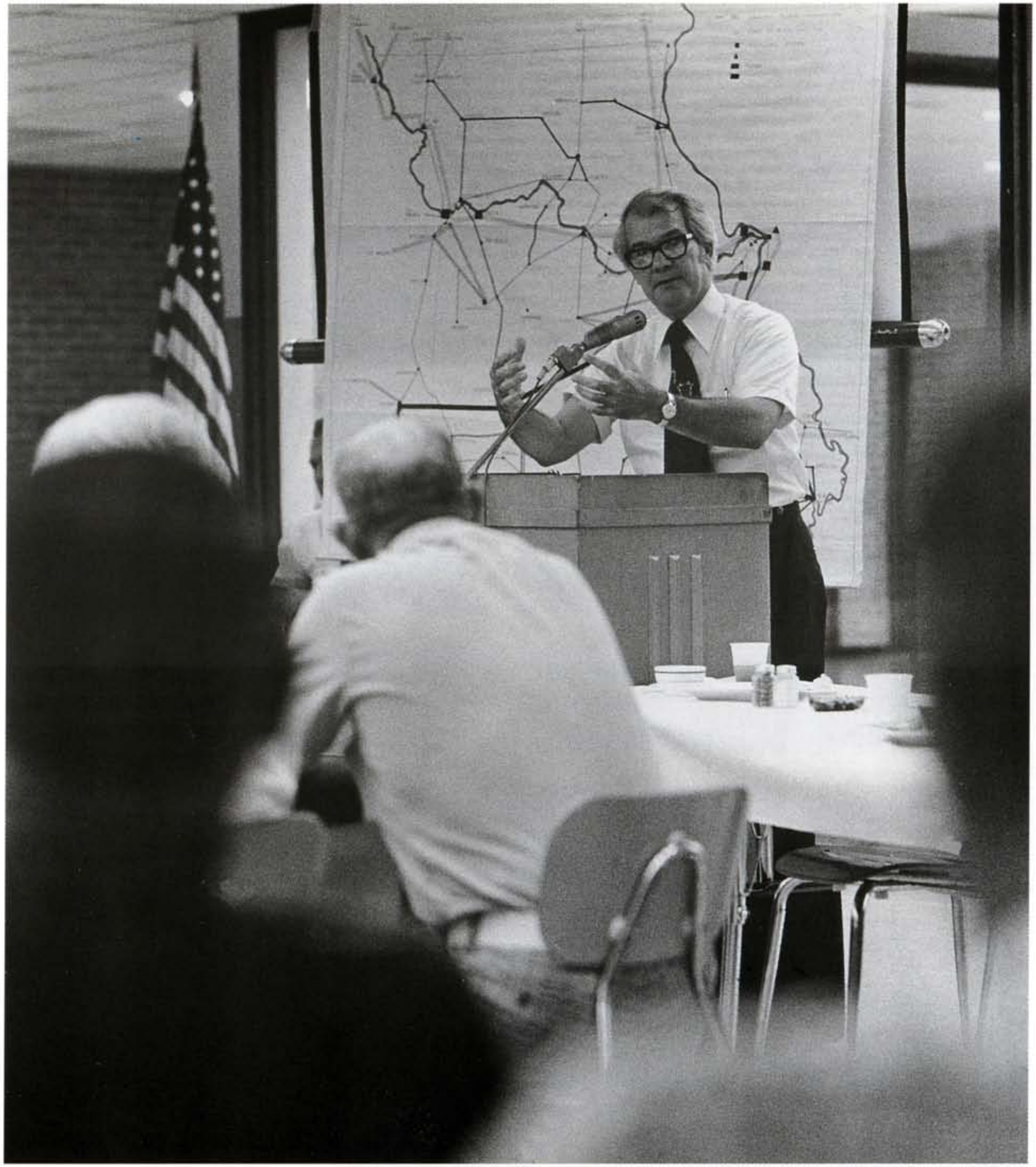
Art Winkler, shift supervisor, left, and Thomas Hill Plant Manager Paul Smith probe a fly ash spill from the Unit 2 stack March 15, 1973, to determine how hard the ash is packed around an old 1949 GMC truck.



Thomas Hill Power Plant turns out for a banquet to recognize Cecil Arnett, center, July 22, 1975, for his actions in rescuing employees Paul Smith, Jerry Kaufman and Bill Haffecke, who were injured in an explosion in a 161-kV oil circuit breaker in the Unit 2 switchyard. Insurance company representative James Andrews is on the left and Associated General Manager Gerry Diddle is on the right.

Jim McNabb, left, and Helen and Bill Muckelrath enjoy the Thomas Hill awards dinner for Cecil Arnett July 22, 1975.

May 19, 1973, Gerry Diddle becomes Associated's third general manager and remains until his retirement at the end of 1991.



Doing one of the jobs he did best, Associated General Manager Gerry Diddle rallies cooperative members around the Associated flag during the mid-1970s.

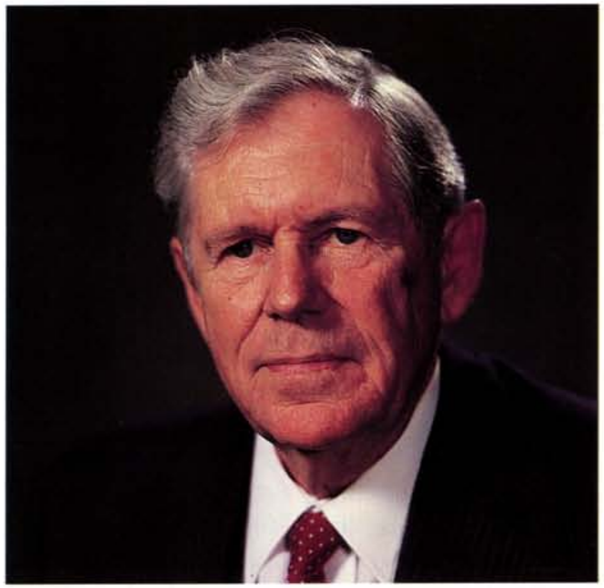
Viewed from the southwest June 6, 1975, New Madrid Unit 2 takes shape.

Shift Supervisor Buster Hampton explains the workings of a turbine during a June 1977 open house tour for the dedication of New Madrid Unit 2.

Starting second from left, General Manager Gerry Diddle; Power Production Director John Russ; President Rudie Slaughter; woman and man (hidden) unidentified; Milt Chase, engineering officer with the National Rural Utilities Cooperative Finance Corp. (CFC); Plant Manager Bill Lawler (in hard hat); Rural Electrification Administration Administrator David Hamil; unidentified man; and CFC Governor J.K. Smith tour the grounds during the June 1977 New Madrid Unit 2 dedication activities.

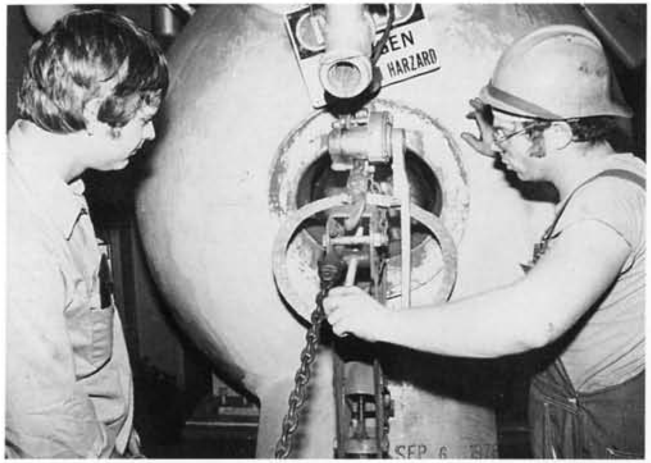
Welding a section of pipe, Ronnie Sandage, left, assembles the necessary piping to pump an acid cleaning solution to one of New Madrid's boilers in 1978. Sam Canoy serves as Sandage's backup.

Allen Williams is Associated's first human resources director.



Rudie Slaughter serves as Associated's president from March 1977 to June 1981.

To access damaged boiler tubes in the superheater section of New Madrid's Unit 1, workers pry apart suspended tube sections, creating just enough space to work. Pictured in August 1979 are, from front, mechanics Gilbert Pritchett, Billy Borders and Neal Houseman.



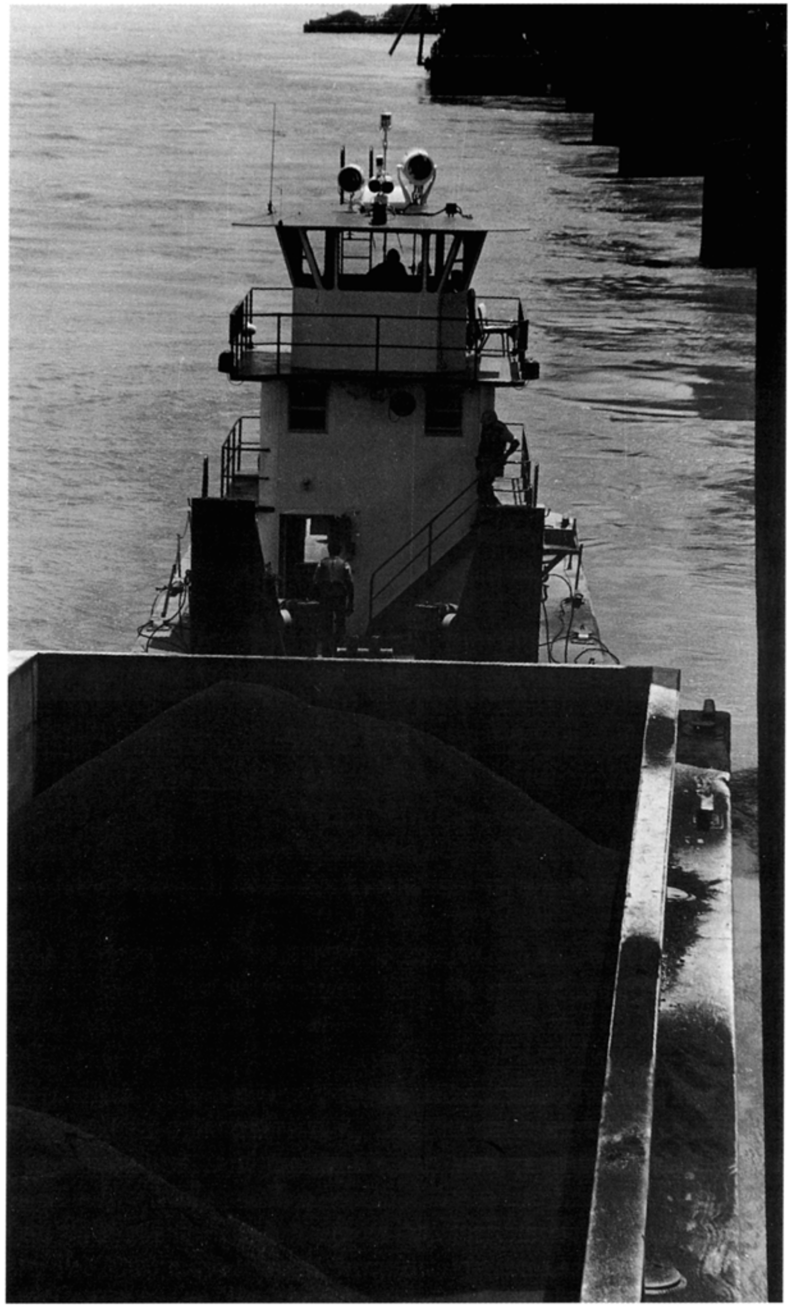
Mechanics Joe Taylor, left, and Steve Cummins remove a high-pressure header while conducting maintenance work at New Madrid Power Plant.

In the 1970s, Associated's board of directors tackles numerous issues and projects, including construction of New Madrid Unit 1 and construction and financing of Unit 2 and Thomas Hill Unit 3; a court battle with Southwestern Power Administration over a transmission service charge; construction of several major 345-kV transmission projects and the first 500-kV line; purchase of Bee Veer and Prairie Hill mines and gearing up for mining; Clean Air Act requirements and changing government regulations; and partnership in the Black Fox Nuclear Station. Pictured, clockwise, from left, are board members Curt Funston, John Davis, Luther Riddle, Carl Herren, O.B. Clark, Ralph Shaw, R.D. Pennewell, Rudie Slaughter and Bob Stagner; General Manager Gerry Diddle and Director of Accounting and Finance Wes Ohrenberg; and board members Dean Sanger, Roy Matthews and Dick Foster.

Some of the first computers Associated uses for dispatching and financial applications are state of the art. By 1996, they seem like dinosaurs compared with the smaller, more efficient equipment in current use.

Don Delzer becomes a dispatcher at Headquarters in 1968, transferring from Thomas Hill where he had worked two years. Dispatchers monitor member load and control Associated's power generation 24 hours a day. As load fluctuates, a dispatcher communicates with control room operators at Associated's power plants who adjust generation to meet current load.

Charlie Perkins, left, and Tim Sullenger work together at New Madrid Power Plant in the mid-1970s.



The City of New Madrid, Associated's boat, pushes a barge into place beneath the coal unloader at New Madrid Power Plant. Associated uses the boat, bought in 1972, until it is sold in 1995 to the St. Jude New Madrid Harbor Service.

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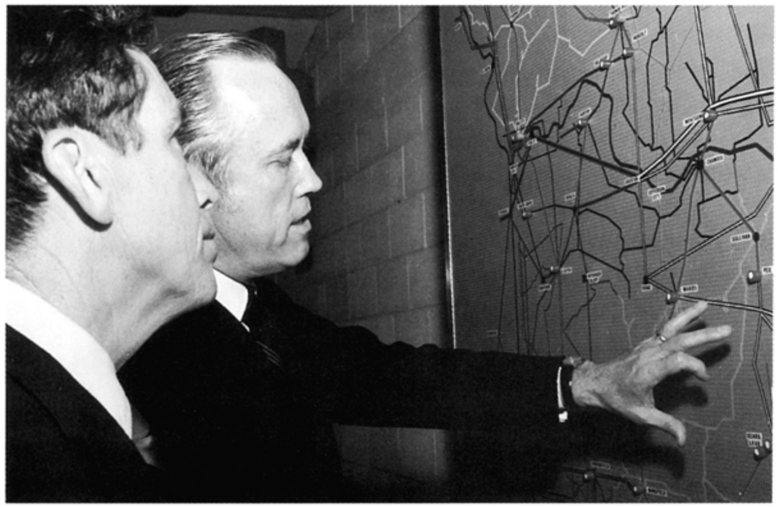
CHAPTER SEVEN

A Prayer to St. Jude

A cocktail party, a Mississippi River barge operator, a prayer to the patron saint for impossible dreams and hopeless causes, a few shenanigans, important utility cooperation, basic need and even a long-ago earthquake played a part in bringing the Noranda Aluminum plant to New Madrid along with the first of Associated's two big power units there.

About the time Thomas Hill Unit l was coming on-line, Adams took a call from Missouri Gov. Warren Hearnes. The governor did not identify Noranda but said a major industrial load was considering Missouri. He had been told that the cost of power would determine whether the company located in Missouri or elsewhere.



Gov. Warren Hearnes, left, initiates discussion with Neil Adams and Associated's board of directors about building a power plant in southeast Missouri to accommodate a new industrial customer. After much discussion and negotiation, Noranda Aluminum Inc. finally selects New Madrid as its site instead of Kentucky. Sam Hunter Jr., a New Madrid banker, credits his prayer to St. Jude for clinching the deal.

We've got our hands full just supplying the cooperatives of this state.

The proposed location, if in Missouri, would be down in the bootheel area. Gov. Hearnes said to Adams, "We really need to stimulate the economy down there – could you provide the necessary power from your new (Thomas Hill) plant?"

Adams was sorry, but no, the cooperatives needed it all. The governor then inquired whether Associated would be interested in building a plant at New Madrid that could supply the requirements. Adams said, "No, we've got our hands full just supplying the cooperatives of this state." Then Adams added, "But you can talk to some of our board members if you'd like." The governor liked. He called a meeting in his office where all the G&T managers and the other Associated board members were on hand along with Adams, representatives of the potential new industry – Noranda Mines Ltd., a Canadian firm headquartered in Toronto – and several local proponents of the proposal, including the New Madrid banker Sam Hunter Jr., who was very determined and aggressive in promoting the little town's economy.

The Noranda representatives were not optimistic. They said power represented 45 percent of the cost of planned production, and they did not know how Associated could expect to compete with TVA or BPA, with whom they already were deep in negotiations.

"But we're here to find out if you really could compete," Bill Stevenson, the Noranda spokesman said, "and the only reason we think there may be a chance is because of what Baxter Southern told us at a cocktail party up in Chicago a few weeks ago."

Southern was a Mississippi River barge operator out of Caruthersville who hauled fertilizer for the Central Fertilizer Co., a cooperative that did much business with Noranda's fertilizer division. Central Fertilizer was holding its annual meeting in Chicago and had invited Southern, as well as some Noranda officials. Over a drink, Southern was introduced to Bill Stevenson, assistant to Noranda CEO Lynn Lumbers. Southern's ears perked up when, in the ensuing small talk, Stevenson casually mentioned that his company was thinking about building an aluminum plant in the U.S., likely in the TVA area. "Why don't you come to Missouri?" Southern asked. "Y'know, we're right on the river and have some pretty good sites, especially up around New Madrid."

Sam Hunter now picks up the story. "The only reason Baxter brought up New Madrid," Hunter laughs, "is that his son-in-law was in the auto business there and Baxter wanted to do something, anything, that might help his daughter's husband sell cars." Southern had one of his employees, Ralph Barnwell, who also lived in New Madrid, get in touch with Hunter. "I had never heard of

Noranda Aluminum initially contacts Tennessee Valley Authority and Bonneville Power Administration when seeking a United States site for its new industrial plant. However, a tip from a Mississippi River barge operator leads Noranda executives to consider a proposal from Associated. Eventually, Noranda builds its plant on the 4,200-acre site now called St. Jude Industrial Park, which is adjacent to New Madrid Power Plant. The plant site is shown above before construction.

Noranda," Hunter said, "but looked them up in Dun & Bradstreet and found out we weren't fooling with peanuts."

By now the governor and his economic development people were deeply involved, and the meeting with the Associated board had been called.

Baxter Southern, it soon became clear, had boasted some about the availability and price of electricity in Missouri. Adams says, "Well, of course, this guy Southern doesn't know the first thing about the price of power, but he's from Missouri and he tells the Noranda people, 'We can meet your price; we can do anything in Missouri that you can do anyplace else. C'mon down.'"

Southern indeed had been unjustly optimistic. None of the IOUs could compete with TVA. Neither could Associated on the basis of any generating facilities it owned or had access to. If Associated were to stand a chance of competing with TVA rates, a new plant would have to be built large enough to benefit from the economies of scale (600 MW as finally constructed), and Associated would need cheaper coal than was available for its Thomas Hill plant. To compound the problems, Noranda needed only 125 MW initially, and Associated did not have markets in sight for the rest. But also at the meeting, listening to the governor's exhortation, were some private power people. One was the president of Arkansas-Missouri Power Co. (Ark-Mo), the company Adams had worked for shortly after college. "Ol' Charlie Czeschin," Adams recollected, "we were pretty good buddies. I had played on his softball team." Walking down the hall after the meeting, Adams put his arm around Czeschin's shoulder and said, "Charlie, if you'll stick with me, I think I can put this thing together. Ol' Charlie says, 'Neil, I'll stick with you 'til the dog dies.'"

Sticking with Adams meant that Ark-Mo would buy a large enough chunk of power from the New Madrid plant to allow it to be built to optimum size. An optimum-sized plant also would solve a power vacuum that made that area the weak link in a broader area. The promise of curing that problem gave Czeschin added incentive for cooperating.

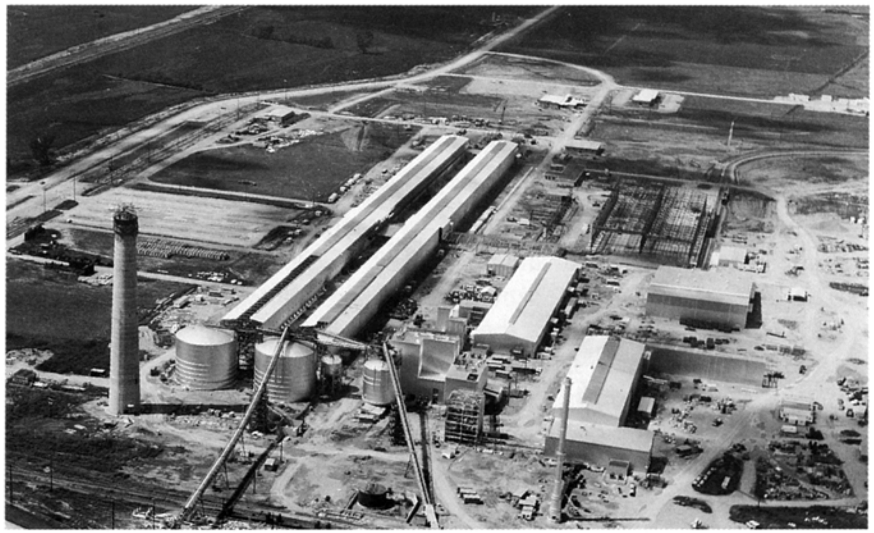
McNabb said Associated and others had initially looked at serving the Noranda plant by building three 150-MW units. The economics just wouldn't work. It took a 600-MW unit, with the economies of scale this size brought, to make it work. There was not then a unit that large operating in Missouri. Associated's total generating capacity was only 625 MW at that time, and its total load was only about 720 MW. What would Associated do for power when this unit was out of service? But Associated had enough transmission connections with big utilities that "we thought we could get enough replacement power if and when the unit went down so the board decided to get in the game," McNabb said. "During the first several years operating with this big unit we had some pretty hairy times but we got through it."

Once the decision had been made to build such a large unit, the price for coal became the controlling factor in the rate Associated could offer Noranda. "We shipped cost projections to Peabody Coal Company where Merle Keltz was president," Adams said, "and we leaned on ol' Merle to cut his price. He cut 'em and cut 'em some more, and pretty soon we got down to where I thought we were competitive." All this time, Adams was working closely with Sam Hunter who was working even more closely with Bill Stevenson. The three had become quite friendly.

Meeting one day at the Library bar in a Jefferson City motel, Stevenson advised his new friend Hunter to quit working on the project.

"Why?"

"Well, you just don't stand a chance of getting it; it's going to Kentucky and the TVA, and I don't want you wasting your time and money."



Noranda Aluminum Inc. contracts for a 400-MW load – enough electricity to power 270,000 homes for a year – and is Missouri's largest electric utility customer.

Hunter couldn't be dissuaded. "You're the ones who are going to be making the decision," he acknowledged, "and you know more about that than I, but we're going to keep working on it."

Now it was Stevenson's turn to ask why.

"Well, Bill," Hunter said, "we may not be successful, but I'm getting a lot of good experience." Hunter dropped it at that, but years later, reliving those events, Hunter said, "Of course, what I had in the back of my mind is that you never know how these things are going to work out, and somewhere along the line we might get a break and they might change their minds and come to New Madrid."

A break – in the form of a news leak – was not long in coming. Noranda had insisted on secrecy concerning its pending decision, but somebody in Kentucky broke the story. That made Bill Stevenson's boss, Noranda chairman Lynn Lumbers, so angry he reopened the decision and sent company experts to New Madrid to take a fresh look. Then Hunter and Adams and others were invited back to Toronto to make a presentation to the Noranda board. The board liked what they heard, but still no deal. Stevenson told Hunter, "You've got a few more things to do." Hunter did them all, including getting an option on 4,200 acres of land.

Now Hunter and Adams were called to Toronto again, sure this time they were going to be told what they wanted to hear. Stevenson wined them and dined them at a restaurant on the 54th floor of the Toronto Dominion Bank and talked about everything except the business at hand. Hunter could not contain himself. He demanded to know why Stevenson had brought them to Toronto. "I don't want to talk about that right now," is the way Hunter remembers the response. Adams remembers the response somewhat differently. "We're 54 stories up," is what Adams heard first, then, "and I don't want to talk about it right now." Back at the hotel, Stevenson finally blurted out, "We're not coming to New Madrid after all, but you guys

Sam Hunter Jr., 1970s

Hunter told Stevenson about the novena he was making ... "a prayer you say normally nine days ... to a saint." Stevenson asked Hunter what saint he was making the novena to. "I said St. Jude. He's the patron saint of desperate and hopeless causes, and we qualify, Bill!"

have worked so hard and become such friends that I just couldn't let you read about it – I wanted to tell you face to face."

Hunter reminded Stevenson that the New Madrid group had complied with every requirement. "What went wrong, Bill?"

Stevenson said it was economics, that Noranda still could buy the power cheaper at another location in Kentucky where they were to get power at cost – no markup.

Hunter argued: "Bill, you know cost is not fixed. There's risk of escalation in everything – coal, labor, interest rates, etc. Whatever their costs are now, they're not going to stay the same and you're going to have to pay. I think you're stepping into a trap. You may not end up with the cheap power you think."

Sorry, said Stevenson, but that's the way it was.

Hunter asked Stevenson if he had anything in writing that could be shown to Adams to see if there was something further Associated could do to match the rate. "I was falling all to pieces, crying like a baby," Hunter said. Stevenson surprised Hunter by offering a copy of the winning power contract for Adams to study overnight. Hunter asked for one last lunch with Stevenson and Lumbers the next day. Then he went to church.

"I had been making a novena to St. Jude, the patron saint of desperate and improbable causes, and I wasn't going to stop now," Hunter said. The New Madrid banker had once told Stevenson about the novena he was making and had to explain: "It's a prayer you say normally nine days. You say these prayers to a saint. You ask the saint to intercede to grant your petition – saints got to be a lot closer to the Lord than we." Stevenson found that interesting but said he still wasn't sure he understood. So Hunter explained further: "Well, Bill, it's like this. Suppose you've got a fellow over here you're trying to get some business off of, but you don't really know the fellow too well. But you have a friend who's got an inside track over there. You ask your friend to see if he can't open the door for you. Well, we do the same with a saint." Still not satisfied, Stevenson asked Hunter what saint he was making the novena to. "I said St. Jude." Stevenson said he didn't know about St. Jude. "I said he's the patron saint of desperate and hopeless causes, and we qualify, Bill!" Hunter explained further to Stevenson, "The only difference is that I am making a perpetual novena. Every day I'm making this prayer to St. Jude. Been doing it for a year or more, every day since this thing started."

At lunch the next day, Lumbers was apologetic, sorry about not being able to locate the new plant at New Madrid. Hunter remembers, "Finally, I said – and I think the Lord put the words in my mouth – y'know, Mr. Lumbers, we have worked hard and Neil has done everything he can to try to get those power costs down, and y'know, I don't think it would be right for Neil or for you to go to somebody else and tell them what kind of rates we were quoting. I think that wouldn't really be ethical, would it?" Lumbers agreed. Hunter turned to Adams: "Do you have that piece of paper Bill gave us last night?" Hunter handed it to Lumbers.

"You mean Bill gave you the deal!" Lumbers exclaimed.

Hunter said, "Not only that, but Bill went over there and beat them down."

Lumbers turned to Stevenson: "Willie, did you do that?"

"Yes, sir, I did."

"Willie, that's not right." Lumbers turned to Adams and Hunter and said that put things in a different light, but

Ed Jehle, 1965

"I don't know how many trips he (Ed Jehle) made to New York to make sure the money people saw the documents they needed to see and got all the other information ... He orchestrated the whole thing."

Jim McNabb

Adams would still have to quote a rate lower than anything he had yet offered.

Adams and Hunter asked to leave the room briefly. They scratched their heads. "My board is going to kill me if I lower that rate any more," Adams groaned. Hunter countered: "Neil, you've been needing some more power down there and this Noranda deal is the key to your future, and some way you're just going to have to save this deal." Adams got on the phone to the Peabody Coal president, Keltz, whom he caught at the gate of the Los Angeles airport ready to board a flight to Australia. He asked for another 50 cents a ton. Keltz was taken aback but finally said, "I'll do it, but this is the last I want to hear from you. Goodbye." The coal was to be barged from Illinois.

The pair rejoined Lumbers and Stevenson. Adams made his offer and asked would Noranda now come to New Madrid. "Yes, but there's still one problem," Lumbers said. "We sold New Madrid to our board once, then unsold them. Now, I've got to go back and sell them on New Madrid all over again." Hunter said, "Mr. Lumbers, let's shake hands. I've got the utmost confidence in you and I know you can do it." When they shook hands, Hunter snuffed out a cigarette and put down his drink.

On the way out, Hunter told Adams: "I also made a deal with the Lord last night. I told Him that if He would let this happen, I would never have another cigarette or drink." That was in 1968. To this day, Hunter, who smoked a lot and liked his whiskey, has not had a smoke or taken a drink.

New Madrid still had to sell the industrial bonds for the Noranda site on which Hunter had obtained an option and arrange financing for the power plant, too, because REA money was not available to Associated.

Early on, Noranda had inquired about potential government help for building docking and other facilities – water, sewer and the like – for an industrial park. Hunter

You hear about all those Wall Street hot shots. You find out they're not so hot.

recalls that the town was already working on an industrial park and had put in an application for federal help that would satisfy Noranda's needs.

Suddenly, the government clamped a lid of $5 million on industrial development bonds. "We were talking $90 million or so," Hunter says. Then he found the loophole, a grandfather clause related to pending applications. "We were lucky again," he says, "because we were the only place Noranda was considering that had actually made an application on behalf of Noranda." New Madrid got the federal aid and named the 4,200 acres St. Jude Industrial Park.

As for the power plant, New Madrid got in under another wire. Not long after New Madrid made use of municipal revenue bond financing in the amount of $98.6 million for the new power plant, plus a second financing of some $63 million after inflation and cost overruns left the project short, the rules governing such bond issues were changed. Municipal revenue bond financing no longer could be used for the benefit of any electric power entity.

The city owns New Madrid Unit 1, which Associated operates, and the city issued the bonds. But Jim McNabb says of his friend and longtime cohort at Associated, "Ed Jehle is the one who did all the legwork. I don't know how many trips he made to New York to make sure the money people saw the documents they needed to see and got all the other information. He had a whole team of lawyers to help him, and I helped him with studies, but he orchestrated the whole thing."

Jehle was happy with the 6.75 percent interest rate he negotiated, but otherwise gives a kind of "aw, shucks" shrug to McNabb's tribute. He says, "Country boy goes to Wall Street. You hear about all those hot shots. You find out they're not so hot."

In any event, the city slickers treated him no differently than anybody else trying to borrow $100 million dollars. Politely, thank you.

No community that small has ever borrowed that much – not before, not since. Of course, no community ever had a guarantee like New Madrid's. "Remember," says McNabb, "those bonds were underwritten by Associated. If that plant were ever to fall into the Mississippi River, that would be Associated's problem, not the city's."

McNabb added that because "REA did not have any money for us," financing additional needed capacity through the arrangement offered by the city of New Madrid-Noranda deal was very important to Associated at the time.

The largest earthquake in the recorded history of the United States came into play partway through the bond sale. Bernie Flood, in charge of the financing by Lehman Brothers, called Hunter one day clearly worried: "Sam, how much damage did the earthquake do?" Sam wanted to know what earthquake. Flood said there had been a story in the New York papers about a small earthquake along the New Madrid fault, with great emphasis on the fact this was the site of the 1813 earthquake that had far exceeded the 1906 San Francisco quake or any other U.S. quake. "It's making it hard for me to sell bonds," Flood lamented while Hunter puzzled. "I told Bernie," Hunter says, "that it was indeed true that we once had an earthquake 8 on the Richter scale a long time ago and more than 100 miles from here; we have never found one visible sign of that earthquake here although over in Tennessee it made the Mississippi flow backwards and created Reel Foot Lake. Ever since that they've called it the New Madrid Fault."

That calmed down Bernie somewhat, but he still wanted to know why an earthquake 100 miles away would be named after New Madrid. "I don't really know," Hunter told Flood, "but here's what I think: you always associate any disaster with the nearest town. How many towns do you think were down here then? Not any others. Just New Madrid. So they named it the New Madrid Fault." Flood asked, "May I quote you on this?" Hunter said, "Bernie, you can quote hell out of me." The bonds sold.

Partners sign papers Dec. 10, 1968, issuing $183.6 million in revenue bonds to finance development of St. Jude Industrial Park, including the docks there, and construction of New Madrid Unit 1 and Noranda's aluminum plant. Gathered for the signing in New Madrid are, seated from left, John E. Buck, Associated president; Neil Adams, Associated general manager; Robert Riley, New Madrid mayor; standing from left, R.D. Pennewell, Associated board secretary; Ben Bedford, Lehman Brothers; Ken Cork, Noranda treasurer; Richard Wood, REA assistant administrator; and Hal Hunter, New Madrid attorney.

In the summer of 1970, crews construct the New Madrid Power Plant and stack. Noranda's rod and wire plant is in the foreground, and its aluminum potline is situated in the center of the photograph. The facilities receive power from Associated's Thomas Hill plant until New Madrid goes on-line in 1972.

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Millions, But No Cab Fare

Board President O.B. Clark tells the story of the farmer who was asked by a reporter to explain the key to his success at a time others all around him were failing. "Experience," the farmer replied. How do you gain experience, the reporter wanted to know. "By making good decisions," the farmer said. And how do you learn to make good decisions, the reporter persisted. The farmer grinned: "From making bad decisions." O.B. humbly acknowledges that Associated has had a lot of experience.

Some of it came with the financing of a second 600-MW coal-fired unit at New Madrid, authorized by the board in 1968. Some came from the construction of an even larger unit (670 MW), Thomas Hill Unit 3, authorized in 1976. Still more came from the aborted Black Fox Nuclear Project in which Associated had agreed late in 1974 to become a

Whether on the farm or in the boardroom, O.B. Clark admits experience is gained the same way – by learning from mistakes. During its early years, Associated learns many lessons the hard way.

partner with Public Service of Oklahoma (PSO).

Not that all the good results came from bad decisions.

When New Madrid Unit 1 started operating in 1972, its 600 MW more than doubled Associated's generating capacity. The 180-MW Thomas Hill Unit 1 – huge for Missouri cooperatives – had started producing power in late 1966. Thomas Hill Unit 2, in 1969, added 303 MW. But load growth had become phenomenal – more than 12 percent per year – and all indications were that the combined million-plus capacity of those three units had to be doubled again in short order. A second 600-MW unit was scheduled for New Madrid.

But a new way to finance the next big addition had to be found. The type of financing that had worked for New Madrid Unit 1 was no longer available. Further, the newly elected Nixon administration had sharply restricted REA financing. REA could lend limited sums of money out of a revolving fund to distribution cooperatives at 5 percent, with supplemental funds coming from a new lending agency, the National Rural Utilities Cooperative Finance Corp. (CFC), at whatever current market rates might be. But none of this money was to go to G&Ts. What to do?

Ed Jehle, who had been the hero of New Madrid Unit 1 financing, still had his Wall Street contacts. Within a very short time he had lined up 16 insurance companies to provide private financing. But a new snag developed. The federal government, as lender for all previous Associated financing, had first lien on all of Associated's properties. What could Associated offer the insurance companies in the way of security for the loan? Associated found a novel, if short-lived, solution. The board formed an entirely new organization called "Federated" which would own New Madrid Unit 2 and thus be able to give the insurance company lenders a lien against it. Many of the Associated board members became members, also, of the Federated board. For a brief period, Associated was a two-headed monster.

From left, Gibby Hilkemeyer, Irene Robinett and Truman Green, 1975

Ed Jehle, who had been the hero of New Madrid Unit 1 financing, still had his Wall Street contacts. Within a very short time he had lined up 16 insurance companies to provide private financing. But a new snag developed.

But before the new insurance-company financing was implemented, Congress acted to give REA authority to make loan guarantees to CFC, also permitting these guarantees to be used at the Federal Financing Bank (FFB), the entity that finances all government spending. Suddenly the G&Ts could borrow money from the FFB at the government rate, plus an increment for administering the loan. That occurred just after Gerry Diddle arrived as general manager. He went to his former boss at REA, Administrator David Hamil, to ask that Associated be allowed to participate in the guarantee program. Hamil agreed. Diddle recalls that it cost Associated something to do that: "We had some 2 percent money that we had to give up in exchange for the guarantee." CFC also agreed to provide part of the financing for New Madrid Unit 2.

The issue of terms and conditions connected with Jehle's proposed private financing had been boiling before Diddle arrived on the scene. Curt Funston, manager of NW G&T and a veteran on the Associated board, recalls: "There were things about the financial package Jehle had negotiated that really bothered some of us. One was that they required extremely tight covenants with every distribution system in the state. If one of our systems had ever gone into default, it would have triggered a call on this entire package."

Funston found three allies in Alan Swanson, Dick Foster and Gibby Hilkemeyer. Swanson was general manager of West Central Electric and Missouri's representative on the board of the CFC. Foster was manager of Atchison-Holt Electric Cooperative and later a successor to Funston as manager of NW G&T. Hilkemeyer was manager of Three Rivers Electric Cooperative and president of the Central G&T board. The three, along with a few other like-minded cooperative people, traveled to Washington to tell their concerns to J.K. Smith, the Kentucky cooperative leader who had become governor of the new CFC. Smith said that if they could get REA Administrator Hamil to "go along" – that is, guarantee a portion of the loan – CFC would provide the rest of the financing.

"We went over to Dave Hamil's office," Funston continued. "I thought he was a great man and a wonderful administrator, and I'll never forget what he said: 'Boys, I think we can work with CFC and you boys in Missouri and, boys, we'll get 'er done.'"

Funston and his allies returned to Missouri to make a presentation to the Associated board. "And of course Jehle and Mike (Boudreaux) were bitterly in opposition to the new government financing package because of all the work they had put in on the other deal." (In fact, Jehle largely blamed this incident for his decision to leave Associated a short time later; Jim McNabb, a Jehle fan to the end, has more to say about that in Chapter 14.) Funston went on: "Jehle was with us on the Washington trip, but I must say he was a reluctant part of the team, a damned reluctant part. But we accomplished several things. We got CFC in the big power-plant financing business. We got the job done at a lower interest rate. And we set the course for all the financing with CFC since that time. There's no question in my mind that we saved the ratepayers of Missouri millions of dollars by making the switch when we did, and it was not an easy thing to do, and we did it against some pretty strong opposition."

It still took a while for the necessary congressional action. Holding his thumb and forefinger nearly touching, Diddle said, "We came this close. The board had signed all the documents. We were right on the razor's edge when the guaranteed loan came through."

The new Federated, invented for a purpose for which it never had to be used, expired. New Madrid Unit 2 came online June 1, 1977.

The board chose to build the next big power plant at Thomas Hill – Unit 3 – after considering a site in northwest Missouri. "At the time," Diddle remembers, "load growth was phenomenal." Then while Thomas Hill Unit 3 was under construction, "load growth came to a screeching halt." High interest rates, a downturn in the economy

BLACK FOX STATION

"Nuclear power looked like the way to go ... Of course nobody could foresee what was going to happen to the nuclear power industry. Contracts were signed and preliminary work commenced, but before construction could begin the Three-Mile-Island nuclear accident happened."

Gerry Diddle

nationwide and the Arab Oil Embargo had slowed electricity use and, for that matter, all energy use. Inflation had elevated interest rates so even the government-guaranteed financing Associated obtained for Thomas Hill Unit 3 cost 13.5 percent on average – 6.9 percent in the early going, 16.36 percent toward the end. Almost overnight Associated found itself with a huge surplus of expensive power.

Associated faced the only big rate hike in its history. One 18 percent increase went into effect in 1982 and was to be quickly followed by another. The second increase never happened. Diddle explained: "Middle-South Utilities really needed cheaper fuel costs. They had a lot of oil-fired units and the oil embargo had driven the price of oil out of sight. For Middle-South, our coal-fired energy looked cheap. They wanted everything we could sell. And, fortunately, because we had built a 345-kV interconnection ... well, it was a salvation for us, another win-win situation. They shut down some expensive oil-fired units and saved a lot; we sold all our surplus and saved a lot."

Meanwhile, Associated had a brush with another financial disaster.

Public Service of Oklahoma, planning a nuclear unit for its own needs, invited Associated and an Oklahoma cooperative, Western Farmers, to participate in a second such unit. "We were looking at $1,200 per installed kilowatt of capacity, but the fuel costs would be low, about 6 mills per kilowatt-hour," Diddle recalls. "Our highest cost unit was Thomas Hill 3 at $800 per installed kW. Blended with the two Thomas Hill units built in the '60s and the two New Madrid units built in the '70s, Associated's average cost per installed kW was only about $175. But with what was happening to fuel costs, nuclear power looked like the way to go and the PSO invitation looked attractive. Of course nobody could foresee what was going to happen to the nuclear power industry. Contracts were signed and preliminary work commenced, but before construction could begin the Three-Mile-Island nuclear accident happened. We had to terminate a lot of contracts. In all, it cost our members $120 million."

Like Diddle, Jim McNabb considered the Three-Mile-Island accident the "luckiest thing that ever happened to Associated." He said, "We were digging a hole and moving dirt at 90 miles an hour. The next step would have been a construction permit. That would have been big money. We were next in line for a permit when the government declared a moratorium on all nuclear permits and new starts because of Three Mile Island.

"When we first decided to get involved in Black Fox there was not a tremendous amount of public opposition to nuclear power plants," McNabb continued. "During the time that we were doing the initial design and equipment procurement and going through the required hearings, the public opposition to nukes was really gaining momentum. During the moratorium it really started booming, and we were asking ourselves can we ever build the thing? The decision was made to cut our losses. We were able to terminate, unlike some utilities that marched forward into cost overruns and financial disaster, especially as loads flattened."

Associated owned some tax credits it was able to sell to pretty much offset the $120 million Black Fox loss, so its cooperative customers never really felt the impact of that fiasco. Still, Diddle and McNabb agree, it took fortitude for the board to terminate and swallow that $120 million. McNabb observed: "The board made two really good decisions about Black Fox. The first one was to get in. We wanted fuel diversity and the lower costs nuclear promised. Also, a jointly owned unit would have permitted economies of scale. The other good decision was to get out. The more time passed the more we realized and learned what a good decision it was. Still, there was this question: 'We're going to lose $120 million. What are we going to tell our people?' The people understood. We didn't make a bad decision. It just turned out bad."

Associated negotiated with REA the largest loan guarantee in the history of the rural electrification program – $1.4 billion. At the time Associated's investment in its entire system totaled only $311 million.

To finance Thomas Hill Unit 3, Black Fox and the new mining operation, and to offset double-digit interest rates in the late '70s, Associated negotiated with REA the largest loan guarantee in the history of the rural electrification program – $1.4 billion. At the time Associated's investment in its entire system totaled only $311 million. Of course, the commitment was not for more of the 2 percent money of the early rural electrification days. It was for a combination of 5 percent REA money and supplemental CFC money at whatever rate the federal government happened to be paying, plus a small markup. Fortunately, just part of the commitment had to be used.

While debating whether to terminate its participation in Black Fox, O.B. Clark recalls that the board was "very cognizant" of contract language that said, in effect, if one partner is unable to finance its share it must hold harmless the other parties. "We thought this might be an opportunity to save some money for Associated. While we were in good shape because of this $1.4 billion REA commitment, we were of the opinion that PSO could not perform financially. Diddle and I went down there to try to get them to admit it."

The ploy didn't work and ended with some humorous embarrassment to Clark and Diddle. As Clark tells the story, "They offered us a ride to the airport, but we said we'd take a cab. I always carry money, but as we hailed a cab I fumbled for money and found I had none. Gerry fumbled. He didn't have any either. We told the cab driver we couldn't use his cab. We had to go back inside and face those guys we had just spent hours telling how flush we were. We had to tell them now we did not have cab fare and would have to avail ourselves of their offer. Talk about taking a ribbing!"

The original logo for Black Fox was, of course, a fox. The project was getting bad publicity for several reasons. One day a little old lady walked into PSO headquarters to point out that a fox is a cunning-looking animal and not a suitable logo for a nuclear power project in trouble. The mystery lady said there had once been an Indian chief in the area with the name "Black Fox." A new logo soon was issued, but not even the wise-looking Indian chief could save the project.

A fire that damaged NW's Missouri City Generating Station was directly responsible for Associated's installation of two 22.5-MW gas combustion turbines at Unionville in the northernmost part of Missouri, near the Iowa border. When studies showed that repairs to the NW coal-fired Missouri City plant, including meeting new environmental standards, would not be worth the cost, AECI elected to go with combustion turbines. The need was for peaking capacity, and combustion turbines are well-suited for that purpose.

Unionville was chosen as the site because Associated lacked a transmission line to the area, and the installation of a small generating station there would postpone the need for the line. It was thought subtransmission would do for the next five years. As it turned out, the combustion turbines enabled Associated to defer a big transmission line into the area for 20 years. The 161-kV, 33-mile line from Hickory Creek to Locust did not have to be completed until 1995.

Investing in Black Fox Nuclear Power Project was one of Associated's most costly mistakes. Not long after it signed a contract with Public Service of Oklahoma to join the project, a nuclear accident at Three Mile Island made headlines. Associated abandoned the project, costing members $120 million.

Twenty miles southwest of Palmyra, up in Northeast G&T territory, far outside the SWPA watershed from which Associated gets almost all of its peaking hydropower, lies Mark Twain Lake, fed by the Salt River. Mike Boudreaux and R.D. Pennewell, then chairman of the Northeast board, always thought it would make a fine hydropower project and in the '60s pursued the idea with their local congressman, the powerful Clarence Cannon. Cannon was hesitant about pushing any project in his own district that might bring charges of "pork barrel," and the two took a long time convincing him. People who wanted the recreation benefits of a hydropower project there formed a lake association and joined the power proponents. That did it, along with blueprints and cost studies produced by Mike Boudreaux showing Cannon the project would pay for itself. In November 1984 the Corps of Engineers completed the 58-MW project. And guess what they named it? Clarence Cannon Dam.

Associated transmits the power over its system back to SWPA which markets it.

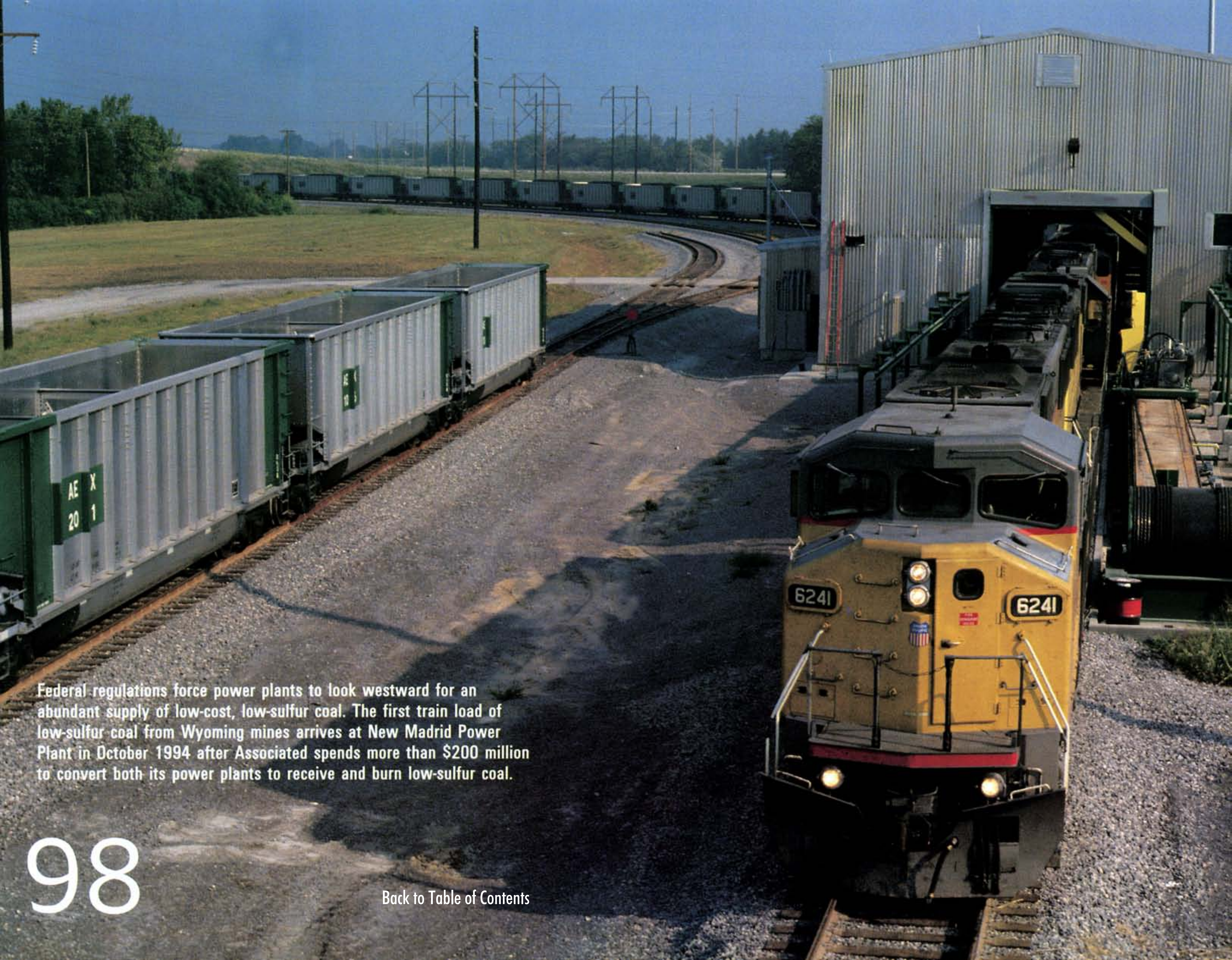
In December 1983, Associated agreed to buy from one of its six G&T owners, KAMO, all the surplus capacity it had acquired in a generating unit built by the Grand River Dam Authority (GRDA). KAMO serves not only eight cooperatives in Missouri with power it buys from Associated, but also nine cooperatives in Oklahoma with power purchased from suppliers in Oklahoma, among them GRDA. So it was no violation of any agreement with Associated when KAMO decided in its own best interests to buy a 200-MW share of GRDA's second 500-MW steam-generating unit. That would allow KAMO to generate some of the thermal power necessary to supply firm power to its Oklahoma customers. But for two

Cannon was hesitant about pushing any project in his own district that might bring charges of "pork barrel."

The short-lived Federated Electric Cooperative was incorporated in December 1971 to finance New Madrid Unit 2 but was never needed. Gathering in May 1975 to sign the documents to merge Federated into Associated are, from left, attorney Gregory Stockard, Mike Boudreaux, Rudie Slaughter, Rex Dewey, O.B. Clark, John Davis and attorney Gene Andereck, right. Rudie Slaughter served as president of Federated during its existence.

reasons, Associated took a long time before deciding to buy KAMO's surplus. One related to the complex relationship between KAMO and the other G&T owners of Associated, a matter dealt with in Chapter 13. The other was that Associated wanted to be sure doing so would benefit its customers in Missouri. The happy ending for everybody was that energy from the KAMO-owned unit is some of the cheapest available to Associated, with benefits to cooperative customers in both states.

Purchasing enormous, $30-million draglines, equipped with 95-cubic-yard buckets, Associated modernizes the Prairie Hill mining operation after purchasing it from Peabody Coal Co. in 1978.



Federal regulations force power plants to look westward for an abundant supply of low-cost, low-sulfur coal. The first train load of low-sulfur coal from Wyoming mines arrives at New Madrid Power Plant in October 1994 after Associated spends more than $200 million to convert both its power plants to receive and burn low-sulfur coal.

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No Business Like Coal Business

Gerry Diddle says the same thing about the coal business that Jim McNabb says about Black Fox: "Getting into the coal business when we did (1978) was the best decision Associated could have made at the time; getting out when we did (1993) was the best decision it could have made at that time."

Bob Stagner, manager of M&A G&T and the Associated board member with longest service – 26 years in 1995 – has the distinction of having made the motion to get in and the motion to get out.

Thomas Hill was brought into being as a mine-mouth power plant because of an offer by Peabody Coal Co. to sell coal there at a price that

Experienced and capable miners enable Associated to operate its own coal mine for more than 10 years. Working three shifts, about 350 employees supply the coal needed to fuel the three generating units at Thomas Hill Power Plant. The Clean Air Act Amendments of 1990, however, force Associated to re-evaluate operating its own mine. In 1993, coal production at the mine ceases and employees embark on reclaiming the previously mined land. In 1996 Associated is purchasing coal from Peabody's Rochelle Mine in Wyoming.

justified it. Still, when Associated installed the first generator at Thomas Hill, the coal Peabody supplied was coming from a mine eight or nine miles to the north. The company's plans were to open a mine adjacent to the plant and, indeed, they did that by the time Thomas Hill Unit 2 came on-line in 1969.

But Peabody was in financial difficulty. McNabb recalls, "They had sold out to Kennecott, but the sale was hung up in the SEC. Kennecott would not give Peabody any money for expansion because they did not know whether their deal was going to go through, so Peabody was stuck."

Meantime, Peabody didn't have the money to equip the new mine the way it should have been equipped to serve Thomas Hill Units 1 and 2.

McNabb called it a "half-baked" operation. "They couldn't produce enough coal, and they were losing money on the coal they were selling us." Peabody was putting pressure on Associated to open up the contract and increase the price. Diddle recollects they wanted cost plus $1. Associated refused.

"The president of Peabody walked in one day," Diddle frowned at the recollection, "and told me, 'Gerry, if you don't agree to pay cost plus, you'll never know where your next ton of coal is coming from.' I said, 'As president of your company you can't walk in here and say something like that without me believing you mean it.'"

The board authorized a lawsuit against Peabody. Before it was resolved, Associated made an offer instead to buy Peabody's Bee Veer and Prairie Hill mines from which the company supplied Thomas Hill Units 1 and 2 – physical properties, coal reserves, everything. The sale was consummated in 1978 for about $20 million, with Peabody to phase out and Associated to phase in by 1980.

"Getting into the coal business when we did (1978) was the best decision Associated could have made at the time, getting out when we did (1993) was the best decision it could have made at that time."

Gerry Diddle

One reason for making the offer was that the Staggers Act had just deregulated railroads which thereafter could charge whatever the traffic would bear for hauling coal. Consultants advised that higher rates were a certainty, ruling out western coal.

REA was not happy about a cooperative getting into the mining business and was slow to lend Associated the necessary funds. REA argued that no cooperative had ever mined its own coal and that Associated was not prepared or qualified to do it.

"We argued, 'We can hire, we can manage,' and finally wore them down," Diddle said, "but not before we had consulted with must'a been five or six mining companies." Associated was in search of one to mine the coal. Diddle remembers them all saying approximately the same thing – they'd be glad to do the job if Associated promised not to look over their shoulders, guaranteed them a profit of a $1 a ton and protected them against inflation. "That was when Jim (McNabb) and I convinced the board and REA, 'Hey, if they're going to be so restrictive and want a guaranteed profit, we can do the job ourselves. We can take their $1 profit and use it for a cushion.'"

McNabb added, "In all fairness, I think cost-plus was the only way anybody would take on the job in those days; inflation was so wild then."

The purchase was a good deal in part, Diddle said, because Associated inherited a crew of capable miners. Associated had only to hire its own supervisors.

"But we had to buy draglines and all sorts of equipment to increase production. Peabody's largest dragline had a 35-yard bucket. We installed three new draglines with 95-yard buckets at a cost of $30 million each. We worked out leasing arrangements for these that cost less than to buy them outright. We put in a new wash plant and other state-of-the-art equipment, all at a time of double-digit interest rates. The equipment we inherited was not capable of producing 500,000 tons a year, let alone the 1.2 to 1.4 million we needed for Thomas Hill Units 1 and 2 or, when Thomas Hill 3 was added, 2.6 million tons." (Associated continued to have business dealings with Peabody which supplied the two New Madrid coal-fired units with Illinois coal barged down the Mississippi River.)

> "We tried to soften the blow, to transition out of this with a good severance package for the employees and a variety of tax concessions to the communities."
>
> Jim Jura

Later on, Diddle said, "Things didn't turn out as expected."

Rail rates for low-sulfur western coal went down, not up. Competition developed. Then the world turned against high-sulfur coal. "Economics dictated us getting into coal, and economics dictated us getting out."

But getting out was even harder than getting in. The issue was coming to a head as Diddle retired and Jim Jura took over in 1991 as general manager. "There are those who think I was brought in here to close down that operation," Jura recounted, "but that was not the case." A new Clean Air Act dictated the decision. It was cheaper to buy low-sulfur western coal, including transportation costs, than to continue using Missouri coal with the added cost of scrubbers to get the sulfur level down to new clean-air standards.

The last year Associated mined at Thomas Hill, coal cost $1.60 per million Btu. Projected costs for western coal delivered to Thomas Hill were 85 cents to 95 cents. A new contract being negotiated for coal at New Madrid promised to lower costs from $1.30 to $1.10 per million Btu. "As we studied the economics, it became only a matter of when and how," Jura said.

It was not an easy thing to do because, among other things, Associated was not free to reveal the prices – negotiations were still under way. A bigger factor, in Jura's words: "We were the coal-mining industry of the state of Missouri, the last big mining operation, and there were going to be injured parties." The mine was a big payroll, a big taxpayer. A lot of good people were going to lose their jobs. Counties would be losing revenues and schools, an important part of their tax base. "We tried to soften the blow, to transition out of this," Jura said, "with a good severance package for the employees and a variety of tax concessions to the communities."

The voluntary "early out" severance package was more than some cooperative members thought it should be. It included education and retraining programs, as well as a year's wages, plus one month's wages for every year with Associated. Some ratepayers said, "To hell with it, give 'em two weeks' severance."

Jura said he could understand the ratepayers' feelings. "To a lot of people, two weeks' pay sounded like a lot of money. And the settlement was a lot of money," Jura conceded, "but we knew the value of getting out – millions and millions for our rural electric consumers."

When he first met with his mining employees, Jura said, the union didn't believe Associated had alternatives so much more economical that the mines had to be closed. Jura started an internal education program. Then he realized he would have to broaden the education program throughout the community. "We started a formal public involvement program," he said. "We put out volumes of literature – 'Fact Sheets,' 'Backgrounders,' 'Issue Alerts.' We invited people to testify, to bring in their lawyers and their technical experts, to challenge our need to shut down. We went to the governor's office and to the state legislature."

At times it was heart-wrenching, none more so than during hearings at the legislature when miners' children, stationed in the corridor by their parents, would tug at Jura's pant leg: "Are you going to take my daddy's job away?" There were various threats. One mine worker told Jura, "We won't let the trains (carrying western low-sulfur coal) come in."

Yet, Jura said, "I can't say enough for the leadership of the United Mine Workers. They fought hard and got the kind of settlement they deserved. Militants were putting a lot of pressure on John Bruno, the local president, but he was a balanced and fair man."

Jura also had high marks for Frank Stork and Don McQuitty of the Association of Missouri Electric Cooperatives (AMEC). "They really did a job for us with the legislature." And he had special thanks for Mike Vallez, head of Associated's mining operation. "He knew and understood why this was necessary, even though he is one of those who had to go when the work went."

As for the switch to western coal, some $210 million in modifications were required. A nearly 17-mile rail spur had to be built from the main track to Thomas Hill, and a two-mile spur to New Madrid along with loop tracks for unloading also were constructed. Both plants needed rotary unloaders to unload the railroad cars. The crushers and conveyor belts and other coal-handling facilities had to be modified. It all got done in time for Associated to

Protesting Wyoming coal

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start burning Wyoming low-sulfur coal at both Thomas Hill and New Madrid in 1994.

Thanks to an acid rain contingency fund, the $210 million cost was paid without a rate increase. The fund was started in 1989, shortly before passage of the Clean Air Act amendments and before the costs of compliance could be predicted. The fund was accumulated by deferring margins above a 1.1 Times Interest Earned Ratio (TIER).

In yet another respect, the switch to western low-sulfur coal could not have come at a better time. Associated began negotiating when coal and railroad companies were aggressively seeking new customers and signed favorable contracts through 2010. Its 1994 annual report said that by closing the mine and switching to low-sulfur coal, Associated expected to save $217 million over the cost of scrubbers and mining local coal by 1998 and $357 million by the year 2000.

Controlling high fuel costs for the New Madrid coal-fired units took imagination and some strong action to prove Associated wasn't bluffing. The original contract provided for Peabody to mine Illinois coal at its River King facility where it also had a wash plant, move it to St. Louis by rail, then barge it down the Mississippi to Associated's river unloader. (A wash plant removes the impurities, mostly dirt and rock, but some sulfur, too, from coal.) The rail part of the total transportation cost kept going up. The Kaskaskia Port District, named for the river that empties into the Mississippi at that point, was seeking to develop more business volume. It liked the idea advanced by Mike Boudreaux of Northeast G&T to build six miles of railroad track from the wash plant to its docks. The coal then could be loaded into barges there rather than at St. Louis, 25 miles more distant, with big savings. The port district built the railroad line, the dock and related equipment, with Associated providing the funds. Associated paid itself back through savings that turned out to be $3 per ton. "We were now in the railroad business, as well as the coal business," Diddle said, somewhat bemused.

Diddle also recalled how Associated was able to use its Thomas Hill mining operation and a strong transmission system to negotiate better prices with Peabody for coal delivered to New Madrid. "We'll generate all we can up there and buy less Peabody coal down here," Diddle told Peabody. A negotiator for the coal company responded, "That's immoral to use your transmission system and not burn our coal and, besides, we don't think you can do it." Diddle said, "You better believe we can," and to prove the point shut down one of the huge units at New Madrid for a month or two. "We negotiated several price reductions after that," Diddle smiled.

Two of the biggest lawsuits in Associated history to 1995, with the greatest consequences for cooperative members, involved coal.

In 1976 the federal government brought suit to shut down the big New Madrid plant for emissions that violated environmental standards. Only the first of New Madrid's two 600-MW units was then in operation, but it was producing more than half of Associated's power supply at the time. Associated had tried to upgrade the plant with Babcock & Wilcox (B&W) precipitators, but the new equipment wasn't doing the job. With the Arab Oil Embargo in full force and the price of all energy skyrocketing, it was the worst possible time to shut down a power plant.

"We did two things," attorney Gene Andereck remembers. "First, we filed for dismissal on grounds that the suit had been brought under the name of the environmental administrator when it could only be pursued by the secretary of Interior. The judge had to rule for us, and he did." Andereck went on: "We knew government lawyers could refile. But before they did, I said, in effect, 'Hey, you don't want to shut us down; hell, the government is financing this plant. You're mad at Babcock & Wilcox who made the precipitators that don't work, not us.'"

That was right, the government lawyers replied, but there wasn't anything they could do about the vendors. "Tell you what," Andereck said, "I'll go back and try to talk my board into suing B&W, and we will not settle with them until we have your blessing – we'll be your surrogate. You leave us alone, and we'll go after the manufacturer. You can go back to Washington and tell your bosses you may have lost the first round on a technicality, but you talked those guys (Associated) into doing what really needs to be done." Andereck continued: "Win-win. We kept our plant operating; they got pressure put on the vendors."

Peabody's Rochelle Mine

The switch to western low-sulfur coal could not have come at a better time. Associated began negotiating when coal and railroad companies were aggressively seeking new customers and signed favorable contracts through 2010.

No sooner had Associated filed suit than the B&W president came in to Gerry Diddle's office and said, "I'll give you two and a half million dollars to settle this case."

Diddle said, "If you offered us twice that much we would not take it because we've told the government that to keep from shutting that plant down we're going after you."

A couple of years later, Associated did take $4 million in spare parts in settlement.

The threatened shutdown was so serious in Andereck's view that Associated might have had a ratepayers' revolution or even been put out of business if it had had to buy substitute power in a bad market. Andereck remembers that when the government suit was filed, Associated called a meeting in Jefferson City and invited the directors of every cooperative in Missouri. More than 300 cooperative leaders heard Diddle tell the news and warn that, if the government were to win, "Your rates are going through the ceiling; I've got to tell you this so you can be prepared."

Diddle called on Andereck to explain the situation further. John Davis, manager of Sho-Me G&T stood up and said, "Mr. Lawyer, what we want you to tell us is, is our chance to win 50 percent, 75 percent, 30 percent – what are the odds?" Andereck said, "John, it's 100 percent, and the reason it is 100 percent is that if we lose, the results will be so horrendous we can't even consider that possibility."

The other coal lawsuit that had as potentially grave consequences for ratepayers came right after Associated got into the coal business. It was called the "purchased coal litigation" and was fought out in the courts of the District of Columbia, where years earlier Congress had allowed the United Mine Workers of America (UMWA) to create a jurisdiction.

The issue was whether Associated would have to pay into the UMWA's pension fund a certain sum per ton of coal burned. The union claim against Associated resulted from a long-standing agreement between the bituminous coal operators and the union. "We had never been a party to the agreement," Andereck exclaimed, "and from the day we got into the coal business we took the position we were not obliged to pay that tribute." The charge was between $1 and $1.27 per ton of coal burned, and Associated was burning about 3 million tons a year at New Madrid and nearly that much at Thomas Hill. Over the life of the power plants, that represented a huge sum of money.

The New Madrid case dragged on eight years before the parties were ready to go to trial.

The litigation actually was divided into two cases, one involving New Madrid and the other Thomas Hill. The New Madrid case dragged on eight years before the parties were ready to go to trial. Two weeks before trial, the UMWA capitulated, and Associated did not have to pay what was referred to as the "coal penalty" at New Madrid. Those savings amounted to some $3 million per year.

"Then," Andereck said, "we turned around and brought a similar action at Thomas Hill. We won that one too, saving another $3 million or so per year." The board authorized that filing in October 1993; Andereck filed the next February and won summary judgment in August of the same year.

Andereck said there were two reasons for the quick resolution of the Thomas Hill case: "We were totally prepared, with all our technical data and witnesses lined up, and told the mine workers' lawyers, 'If you think our client (Associated) won't fight this one through to the finish, we just came off eight years of litigation in the New Madrid case and we're ready to do it in this one too, and you might as well save the money.'" Andereck was unblushingly proud because it is not often that a lawyer can get for his or her client millions of dollars in effective verdicts in a United States District Court in just five months with a signed judgment that is not appealable.

In the case of New Madrid, Associated won on the grounds the contract it inherited when it went into the mining business at Thomas Hill in north-central Missouri did not apply to southeast Missouri. As for Thomas Hill, Associated argued that bituminous coal is not the same as sub-bituminous coal, and that when it switched to western coal, although not lignite, it was sub-bituminous coal as technically classified in geology and therefore outside the terms of the contract.

These lawsuits came during the early part of the computer age, and Associated was in the forefront of utility industry use of computers. In the UMWA case, Associated computer people – Andereck credits Pat Mills mainly – created computer programs that Andereck could work with in the courtroom. "In the past," he said, "as a lawyer involved in an issue where I had an engineer behind me and a witness on the stand testifying, I would say to my backup engineer, 'Is that so?' He'd have to take out the slide rule and calculator and maybe I wouldn't even get an answer in the same day. Now, we would bring in a computer in a suitcase and we could put the facts up on a screen almost instantly."

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