

# NETWORK

M A G A Z I N E

*STORIES about the people and communities of our co-op network*



TRI-STATE Generation and Transmission Association

Fall 2006



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A Touchstone Energy® Cooperative



*Cover: Zucchini is one of the four varieties of squash grown for Colorado Farm to Table. The project provides fresh produce to financially strapped families in the upper Arkansas Valley.*

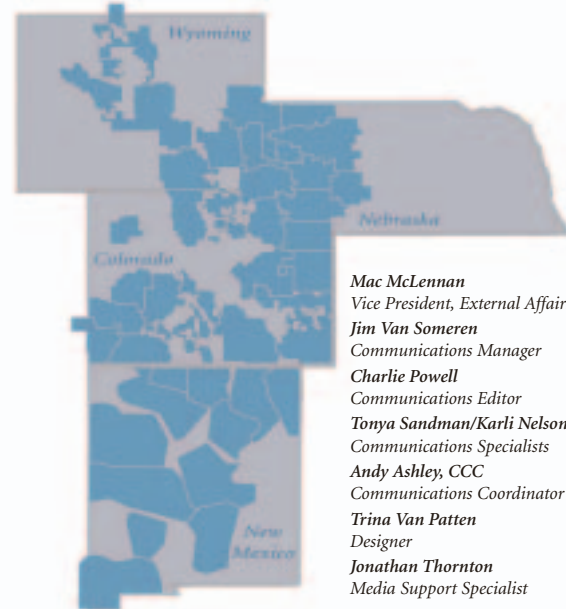
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## Sweet corn, sweet deal

*Farmer Tony Madone grows high-altitude produce that he gives away to families through the Colorado Farm to Table project.*

*Network Magazine is a quarterly publication that tells the stories of the people and communities of Tri-State Generation and Transmission Association and our 44 member rural utilities. Tri-State is a wholesale power supplier serving electric cooperatives in Colorado, Nebraska, New Mexico and Wyoming.*

*Tri-State and our member cooperatives are powering rural residences, farms, ranches, businesses and industries. While we operate the power plants and maintain the power lines that deliver electricity, it is the member-consumers who provide the energy and spirit that sustain our communities. To learn more about Tri-State, visit [www.tristatetg.org](http://www.tristatetg.org).*



Mac McLennan  
Vice President, External Affairs  
Jim Van Someren  
Communications Manager  
Charlie Powell  
Communications Editor  
Tonya Sandman/Karli Nelson  
Communications Specialists  
Andy Ashley, CCC  
Communications Coordinator  
Trina Van Patten  
Designer  
Jonathan Thornton  
Media Support Specialist

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*Your comments and suggestions are welcome. Contact editor Charlie Powell at [cpowell@tristatetg.org](mailto:cpowell@tristatetg.org) or call 303-452-6111.*



General Manager's message

## What's driving up the cost of power?

J.M. Shafer

Executive Vice President/General Manager

It has been a little over a year since the Tri-State board authorized the resource development plan that ultimately calls for us to site, permit and construct two coal-based generating units in western Kansas, a coal-based unit in southeastern Colorado and the necessary transmission network to deliver power to our member cooperatives.

I am pleased to report that a great deal of progress on all three of those projects has been made since this ambitious plan was first announced in August 2005.

Working with our partners, an air permit application for the new generation units in Kansas was filed earlier in the year and environmental studies for new transmission lines began in August.

Meanwhile, land and water acquisitions continue for the new power plant in southeastern Colorado. You can learn more details about our resource development plan on our Web site at [www.tristatetg.org](http://www.tristatetg.org).

Until our first new units begin commercial service around 2012, we are going to be faced with some difficult challenges. On Jan. 1, 2007, our average wholesale rate to our member co-ops will increase from 5.1 cents to 5.65 cents per kilowatt-hour. Some of the reasons for this increase are rooted in national energy trends that you've undoubtedly already heard about, such as the increase in natural gas prices since 1999, which has had a dire impact on our purchased power budget. That is certainly a big part of the problem and projections in our 2007 budget are calling for a 21 percent increase in that number — from \$204 million in 2006 to almost \$247 million next year. Of course, a continuing drought that reduces the availability of hydro power, or an unplanned extended outage at one of our 30-year-old power plants, are just a couple of unknowns that have played havoc with our operating budget.

Then there is the matter of growth. Not all of our members are growing at the same rate. A few, such as the ones heavily reliant on irrigation loads, have seen only modest growth or none at all. But most of our 44 systems are increasing in energy sales by at least 3 to 4 percent, and at least 10 of our members are projected to require 50 or more

gigawatt-hours of energy in 2007 than they consumed in 2006.

In the past several years, our combined member loads have grown by approximately 100 megawatts per year, but our current load forecasts indicate we can expect closer to 200 megawatts of growth in 2007.

In order for our member co-ops to grow, Tri-State has to grow right along with them. To do that successfully, we are extending and upgrading transmission lines and substations, as well as making major improvements to the telecommunications network that is so vital to our operations. Needless to say, to accomplish all this, our capital costs have to increase.

Along with Tri-State's rapid system growth have come increased financial obligations, which must be met to maintain fiscal stability and the continued health of the power supply infrastructure. In order to maintain our investment grade rating, Tri-State is required to attain certain operating margins. Our financial goals policy requires that, over time, we increase our equity share to 25 percent. In short, margins and rates have to go up to cover our increasing cash obligations.

Do we anticipate more rate increases during the next several years? Our studies show that is the case for as long as we continue to grow and are vulnerable to outside power markets to meet member obligations — until we get our new facilities up and running.

Right now we are doing everything in our power to accelerate the process of securing those new generation and transmission resources. Once that is accomplished, we believe we will be well positioned to enjoy another period of stable rates just as we did during the late 1980s and throughout the 1990s.

Amidst all of the challenges we're currently facing, a positive aspect of electricity that shouldn't be ignored is the fact that compared to the significant increases in the cost of numerous other consumer goods and services in recent years — such as gasoline, food, housing and health care — electricity still remains a relative bargain for U.S. consumers.

*Along with Tri-State's rapid system growth have come increased financial obligations.*

# Colorado Farm to Table

Feeding the hungry ... with altitude



Salida, Colo., residents (left to right) June Gober, Ginger Ferris and Art Chambers join Tony Madone (seated) during a day of harvesting sweet corn. Produce from Colorado Farm to Table is hand-picked by volunteers.

Story and photos by Tonya Sandman

Buena Vista, Colo., resident and Sangre De Cristo Electric Association member Paul McAllister has become very familiar with one of Touchstone Energy's® core values — commitment to community. For 10 years, McAllister and his wife, Barbie, have been running the Arkansas Valley Christian Mission, a soup kitchen and food pantry that benefits nearly 125 down-on-their-luck families living in Chaffee County. Housed in a small log building given by the local school district and completely furnished with donations from local residents, the mission is a safe haven for families in need of a few days' worth of food that they are able to gather from its cupboards and freezers.

When the harvest season is in full swing between July and October, families who can rarely afford fresh produce are treated to sweet corn, cabbage, broccoli and three varieties of squash donated by a generous neighbor 20 miles down the road near Salida. Tony Madone, Jr., is project manager for Colorado Farm to Table, a one-of-a-kind non-profit organization that supplies fresh produce to food banks, food pantries, soup kitchens and families throughout the upper Arkansas Valley region.

"I was telling someone in Denver about Tony's food-growing operation and he asked me what the elevation was of Salida," said McAllister. "I said '7,000 feet.' He replied, 'you can't grow much produce at 7,000 feet' and I said, 'you want to make a bet?'"

For eight years every August, the mission, Buena Vista's only food pantry, has been receiving vegetables from Tony's farm operation, something that started out as a hobby and turned into a full-fledged charitable cause.

## Planting seeds of generosity

Raised on a farm in Canon City, Colo., Madone realized early on that he had a passion and talent for raising produce. Within a year of his high school graduation, he owned and operated a large produce farm and custom farming business that he continued to expand for the next six years. Greater farming opportunities took him and his wife, Kay, to Idaho where the couple ran a large and successful farming operation for the next 15 years. But, the hard work and long hours required to keep his Idaho spread running caused health problems for Tony, forcing the Madones to sell their livelihood. The couple returned to Colorado, settling in Salida in 1992.

With farming no longer a career option, Madone opened an automotive machine shop; Soon his health improved. "While I operated a successful machine shop, my love for growing produce never diminished. When each spring rolled around, I just missed farming so much," Madone said. So with his improved well-being and another venture flourishing, the farmer-turned-fabricator began to explore the idea of growing produce again.

Building relationships with area ranchers through his machine business, Madone made friends with one local rancher who agreed to let him farm some idle ground in the spring of 1997.

"I kept two of my smallest tractors that I've had since I was a kid," he said. "I was able to get some produce in the ground, but didn't have any idea what we would do with it once it was planted."

By mid-summer, a visit from a longtime friend provided the best suggestion yet — give the produce away to local soup kitchens and food pantries. "I took him out to the field to show him what I was doing, and as we talked he came up with the suggestion to give it away," explained Madone. "And at that moment, I knew that was exactly why I planted it."

For that first season and seven seasons after, Madone grew mostly sweet corn and some cabbage, broccoli and squash on two acres of ground with the intention of giving it away. The bounty, yielding about 15,000 to 17,000 pounds of food each year, was distributed to soup kitchens, food pantries and low-income families in the area. The charitable effort was entirely funded by the couple. About \$2,000 per year was spent on fuel, seed and fertilizer. Tony's time, not accounted for in dollars, is worth even more.

From mid-May to September, Madone put in a full day's work at his machine shop, went home to eat dinner and then began his night job as a

farmer. He worked the land and cultivated the crops until dark each day. "Every extra minute I had, I'd be out on the farm," he said.

In 2005, a Colorado Springs food bank broached the idea of expansion to Madone, who was excited about the possibility of providing produce to even more people. Filling three major food warehouse facilities that could reach communities across southern Colorado with produce now would be Madone's goal. With grant monies being pursued by the food bank, Madone looked for more land on which he could expand the operation.

From the end of the eighth season in 2005 through the winter and into spring 2006, Madone worked with the Colorado Springs food bank to come up with a plan. A larger piece of donated ground — 15 acres in very rough shape, but with good water rights — was finally secured. But the grant money was not.

Saddled with some large expenses, Madone sought a \$10,000 personal line of credit after



SDCEA member services representative Linda McCall is flanked by Barbie McAllister (left) and Peggy Johnson. For nine hours a week, the Arkansas Valley Christian Mission, run by McAllister and Johnson, opens its doors to the hungry, providing them with fresh vegetables, canned goods, homemade soups and more.



draining his personal savings to pay off expenses — about \$16,000 — from the last growing season and the efforts of expansion that included getting the inhospitable piece of land into good condition.

“We had no idea how we were going to pay off that loan,” said Madone, who was no longer drawing an income from his machine shop that had quietly shriveled as he turned his focus to the farm.

In the fall of 2005, there had been enough information spreading throughout the community about the farm that the owner of the local newspaper, *The Mountain Mail*, wanted to write a story about the project. Reluctant to be in the spotlight, Madone finally agreed to the media coverage — spawning considerable community support.

“The kitchens had no idea that the project had been funded for the last eight years by my wife and me until the article came out,” said Madone. Discovering that the family was burdened with a large loan, residents from the local communities of Chaffee and Fremont counties came together to donate money to the project, which ultimately led to the final loan payment in March 2006.

But, the giving didn't stop there. “As a result of the newspaper story, a number of key people in the community stepped forward to help keep the project going,” said Madone.

An accountant lent his expertise to help turn Tony's “farming fix” into a nonprofit corporation, and by last spring the organization was complete with a board of directors and a new name — Colorado Farm to Table, Inc.



### Sowing community spirit

Madone continued to look for donations that would help improve the operation. A cost-share program with the United States Department of Agriculture prompted the farmer to seek \$6,000, half of the total amount of money needed to buy gated irrigation pipe with the USDA's help.

As luck would have it, a public service announcement from Sangre De Cristo Electric Association ran on the radio calling for applications for Operation Round Up®, a program that encourages co-op members to “round up” their electric bill with the extra money subsidizing charitable funds to the community.

“I was in the shop working on a tractor at the time,” said Madone. “There was a public service announcement about Operation Round Up®, but I missed the chance to write down the information. Later that day the announcement ran again, and as soon as I heard it, I wrote it down, contacted Linda McCall and applied for the money. Within a few weeks I received \$1,000 from the co-op.”

With the co-op's donation in hand, Madone was able to secure the balance and purchase the pipe that was used to irrigate the first rows of corn of this season under the Colorado Farm to Table banner.

The co-op was very pleased to help. “Everyone on our board is thrilled with the project and really never realized what he was doing with the farm until he applied for the program,” said McCall, member services representative for the co-op. “In this area, there is such a huge need.”

### Reaping the benefits of Colorado Farm to Table

“The nonprofit status has taken us to a whole new level,” said Madone. “It's not just Tony Madone farming some ground and giving some produce away. It's become far more valuable to the community.”

“I never expected any of this,” he continued. “When we started nine years ago, I just wanted to get back to the dirt. I was just getting my farm fix and glad to be able to do something for someone who needed an extra hand, but that's all the further I expected it to go.”

The 2006 season will be the first produce raised under Colorado Farm to Table, Inc., with nearly eight acres devoted to sweet corn, broccoli, cabbage, yellow and acorn squash, zucchini “and two rows of pumpkins for the kids.” The produce will reach families in need — many of them living in Tri-State's service territory — in Buena Vista, Leadville, Alamosa, Montrose, Westcliffe, Colorado Springs, Florence, Cañon City, Salida, Penrose, Cripple Creek, Woodland Park and the Four Corners region. Kitchens and food pantries in Denver also have approached Madone about deliveries this season.

Madone's dream to provide fresh produce to even more families across southern Colorado and a commitment to help him do so from the communities of the Upper Arkansas Valley are just like the crops he raises on a small piece of ground along Highway 291 — ever growing.

*To learn more about Colorado Farm to Table, or to donate to the organization, visit [www.coloradofarmtotable.org](http://www.coloradofarmtotable.org)*

*Headquartered in Buena Vista, Colo., Sangre De Cristo Electric Association was incorporated when 10 residents pooled their ideas and efforts to bring electricity to residents of the Upper Arkansas and Wet Mountain valleys. In 1942, approximately 14 miles of line was energized. Today, SDCEA employs 33 people, maintaining and operating more than 1,500 miles of line in Lake, Chaffee, Fremont, Custer and Saguache counties and serves more than 10,000 meters.*

*Right: The donated land on which Tony Madone now operates Colorado Farm to Table was an idle field for several years with weeds three to four feet tall across the farm. Before raising various produce and the sweet corn he proudly displays, Madone worked the hard ground for months before it could be cultivated.*



*Center: New gated pipe, purchased in part with a \$1,000 donation from Operation Round Up, a program sponsored by Sangre De Cristo Electric Association, now irrigates the sweet corn fields of the Colorado Farm to Table project.*



# Powerful Needs: Small Colorado co-op fueling the state's energy boom



**G**rowing energy consumption in the United States, combined with concerns about national energy security, has brought to the forefront a need for the reliance on and demand for domestic energy sources. The National Energy Policy Act of 2005 has paved the way for energy development, ushering Colorado into the arena as a key player in oil and gas resources.

Today, the Piceance Basin in northwest Colorado is booming with expansive natural gas development and oil shale research. At the end of the second quarter of 2006, permits for oil and gas drilling in the state were estimated to rise 19 percent from 2005; while last year, permits were nearly 50 percent above 2004 figures. Colorado holds the fifth-largest natural gas reserves in the nation and is the sixth-largest natural gas producer.

Companies are investing in the Rocky Mountain region more than in past years because it is the only area with growing natural gas production. Meanwhile, the Gulf of Mexico and the North American mid-continent have seen declining production. Recent spikes in both oil and natural gas prices have made it more economical for companies to use advanced technologies to more easily recover resources and deliver them to market.

In the early 1980s, oil shale was a hot topic in the region, prompting a flurry of activity. But, oil companies abruptly closed research facilities because of a lack of viable technology and diminishing government funding, leading to economic

*A contractor for White River Electric works on improvements to the co-op's Yankee-Gulch Substation, which will supply for Enterprise Products' new 40-megawatt natural-gas processing facility. Other work at the substation includes a tie line for White River's 138-kilovolt transmission line and new distribution transformers to serve smaller loads in the area.*

**T**his is the second of a two-part series that features different facets of our nation's energy industry and how Tri-State's member systems are serving their electrical needs. After visiting Wyoming, New Mexico and Nebraska, we learned about the importance of a reliable power supply, as well as the value of close-working relationships between the co-ops and their industrial consumers. While the entire Rocky Mountain region continues to see major development, it's western Colorado that holds the potential for the domestic energy industry's biggest growth over the next decade.

*Stories by Karli Nelson  
Photos by David Tejada*

devastation of the area. Today, the future of oil shale is considered more promising with newer technology and market-driven financial support. Geologists estimate that there are nearly 1 trillion barrels of recoverable oil from the Piceance Basin's shale layers. Shell Oil has remained in the basin for more than 20 years and is leading the way in shale oil extraction research methods. The company predicts shale can be profitable if conventional crude oil prices stay above \$35 a barrel; recently, prices topped \$70 a barrel.

## Big expectations for a little co-op

White River Electric Association in Meeker, Colo., is one of the smaller cooperatives in Tri-State's 44-member system network in terms of size and number of meters. Currently, the co-op's annual energy demand totals 20 megawatts. But those double-digit numbers won't last for long. "In the next two years, we're looking at a potential growth of about 500 percent with about 100 megawatts of new load in 2008," said Richard Welle, White River's general manager and 30-year industry veteran.

The exponential increase in megawatts of demand from White River have been requested by various energy developers converging on the region. Fortunately, with existing infrastructure and forward thinking, White River has the resources and plans in place to manage the growth in its service territory.

"In the last 18 months, we've seen a lot of requests for capacity, specifically in the transmission system," said Welle. White River is unique in the fact that it has about 100 miles of its own transmission line, both 138-kilovolt and 69-kilovolt lines. The co-op now is able to utilize some of the transmission system that was built for the boom-to-bust oil shale energy development that took place in the 1980s.

White River is preparing for projects that



include various gas development activities, such as drilling, processing plants and compression facilities. Enterprise Products expects to complete work on a natural-gas processing and distribution center in mid-2007, which will require 40 megawatts, and ExxonMobil plans to begin construction on a similar facility soon thereafter. Meanwhile, other gas companies already have come to rely on electrically-driven compressors at various compression sites in the basin. Additionally, two oil shale test facilities are in the works under the stewardship of Shell Oil, each requesting 15 megawatts.

"Energy development has enormous potential in the Piceance Basin," stressed Welle. "It's going to take a couple of years before everything comes to fruition and construction projects are complete, but during this timeframe we're trying to plan on how we're going to serve them electrically.

"Many large companies already have secured

*Left to right are Ken Anderson, Tri-State's senior vice president of transmission; Richard Welle, White River's general manager; and Charlie Sloan, White River board member and representative to Tri-State's board. The three men discuss plans for the co-op's new construction projects.*

contractual power supplies with White River,” Welle continued. “Of course, each of these companies has multiple phases of development. Our co-op has the capacity to serve this first phase of development, but the existing system will not handle the next evolution — that is what we’re working on with Tri-State.”

### Cooperation with members

While White River may be somewhat geographically isolated from Tri-State’s other member systems in the northwest corner of Colorado, it is not alone as it embarks on this new era of development. White River’s Welle has been working closely with Tri-State staff to create a strategy that will fill the new energy requirements in the co-op’s service territory.

“We want to make sure we have enough ‘heads-up’ about new load to prepare good suggestions for our members,” noted Ken Anderson, Tri-State’s senior vice president of transmission. “Fortunately, we have good cooperation from all our members.

“Now, the reality of this service territory and this region of the United States is that there is no electrical service built to sustain this growth,” said Anderson. “So, we’re working with White River to come up with the first, best plan out there to meet upcoming needs.”

Anderson explained that one of the side effects when you deliver energy is the impact on the region’s transmission capacity. Particularly in the Piceance Basin, new loads will affect the major transmission corridor that originates at Craig Station and terminates near the town of Rifle. “And, if you reduce the amount of capacity on this line, then you’re obligated to make the upgrades necessary to bring it back prior to impact,” said Anderson.

Tri-State’s and White River’s goal initially is to maximize existing assets in the region. First, White River has plans to loop some of their service, to improve reliability. Next, Tri-State is considering an upgrade to existing lines to increase capacity. “Fortunately, there was some vision when the Craig-to-Rifle line was constructed,” said Anderson. “It was built at 345 kilovolts in terms of its construction specifications, but the current capacity is 230 kilovolts. Tri-State could potentially upgrade the line to 345 kilovolts.”

Additionally, with new generation from Springerville Generating Station Unit 3 in Arizona and Tri-State’s planned units at Holcomb Station in Kansas, some of the capacity that is currently flowing from west to east will be relieved and redirected to western Colorado.

Tri-State and its 44 member systems aren’t the only utilities seeing load growth in the region. “There’s competition for the existing capacity — others have desires for use of the same transmission as we do,” said Anderson. “We have a joint planning process in the West, and we work closely with the other utilities that are affected by this region’s transmission capacity.”

Added Welle, “When we start talking about the interconnected transmission system, there are things that have to be done — it’s not just White River and Tri-State. Others want to participate to their benefit or potentially participate in ownership in any upgrade. All those things make the planning process complex.

“Unfortunately, the new resources, new transmission lines and the permitting requirements that we’re going to be required to bring in do not operate at the speed of business,” Welle continued. “Other energy developers say they want to be commercial within two years. That’s an awfully tough timeframe if you’re going to have to acquire right-of-way, permits, then construct the lines.”

To address concerns for meeting timelines, Tri-State has requested that energy developers come to the table for discussions. “The reason we have an interface with consumers is because we don’t want the co-op to look like they have a hesitancy in meeting their needs,” said Anderson. “We understand the aspects and limitations of Tri-State’s infrastructure and that’s what we want to bring forward to the consumer.”

*Below: Tri-State’s Craig-to-Rifle transmission line will provide the needed capacity to White River for delivery of electricity to oil and gas developers in western Colorado.*

*Bottom center: One of the natural gas compression sites atop the Piceance Basin that relies on White River’s energy.*



### Growth to the benefit of all

White River has historically had an average load factor of 85 percent and the additional energy loads coming on will only improve that number. High load factors from consumers are good for utilities because they maximize existing resources.

“Tri-State’s staff believes that growth is good because of the costs of electric service from both generation and transmission aspects,” said Anderson. “There are a lot of fixed costs with inflationary pressures and the growth helps mitigate the pressures. We have to focus on one key thing: the efficient use of Tri-State’s assets.”

Welle also noted that “some of Tri-State’s co-ops are seeing off-shoots from what’s happening here in Piceance Basin. As these pipelines go from this hub in Colorado to the East Coast, along the

way, other cooperatives may see new electric compressors on their lines. So, energy development isn’t just site specific. I think the growth has a tendency to affect others and will reach out to some of Tri-State’s other member systems.

“This is just a snapshot in time for Tri-State,” Welle continued. “This growth spurt is energy related. Over time, we’ve gone through other growth spurts that were driven by irrigation, agricultural or residential development. From the cooperative perspective, there are a lot of things that are tugging at each of us, but Tri-State will get through it if we stick together.

“And, right now, it’s the Piceance Basin’s time,” he emphasized. “The nation, as a whole, needs the energy and we can produce it here domestically in the lower 48 states.”

*White River’s general manager, Richard Welle (left), reviews the progress of substation upgrades with the co-op’s manager of operations, Frank Sampson.*

# Thompson talks about 25 years



## of change

**Network:** Your 25 years of service on the board of Tri-State has provided a full-circle perspective of seeing the end of Tri-State's last major construction cycle in the 1980s and now the beginning of the next one. What kinds of similarities and differences do you see in the issues that you faced then and those you are facing now?

**Thompson:** What we are facing now is similar to the '80s in that the region is short of power and there is a lot of energy-related growth, and growth in general. The differ-

ences, as I see them, are that there is more than just energy-related growth this time; it is a broader, more diversified growth. Tri-State also is larger and more diversified now than it was in the '80s and better equipped to withstand downturns in any one industry.

The main difference I see is that we are coordinating the needs of the region better than we did in the '80s. Also, the plan Tri-State has for this round of building has been studied, not only by the association, but by outside consultants, to be sure we are doing what is necessary to keep up with growth. We are short of power now, so we are probably not in danger of overbuilding. The plan we have developed has off-ramps along the way if growth does not continue, but will provide for the future at reasonable costs if it does.

**Network:** The association has devoted a lot of time studying the resource development plan, which addresses the future generation needs of Tri-State's membership. Do you expect the resource development plan to protect the membership from escalating power market costs?

**Thompson:** Unfortunately there will be cost increases, but they will be far less if we build than if we do not. We believe that this building program will be the most cost effective way to provide for our members' needs in the future. We believe that we can control our costs better by having control of the resources.

**Network:** Tri-State has had a historical connection to the Western Area Power Administration and its precursor, the U.S. Bureau of Reclamation, since its inception in the 1950s. Do you feel that Western's partnering with Tri-State to build the transmission portion of the planned new resources in Colorado and Kansas will offer distinct advantages in the success of the project?

**Thompson:** I definitely think that Western is an asset to us as a partner in building the needed transmission. Western is geared up to do this type of construction. By contracting with Western, we can do the job more efficiently and more cost effectively. This partnership will help solve transmission issues for us, Western and others in the region.

**Network:** There has been a lot of national discussion about the railroad industry's inability to meet its commitments for coal shipments out of Wyoming's Powder River Basin. Do you have any concerns about us having to rely on railroad transportation for even more coal out of that region to feed our new units? Do you see some solutions on the horizon to alleviate this problem?

**Thompson:** Yes, coal is our lifeblood, so I am very concerned about deliveries and stockpiles. The railroads are in somewhat the same predicament we are with building for growth and keeping up with demand. I do see the railroads working to alleviate the bottlenecks and I think there is progress in solving the problems. We have been through some tough times lately, but I am confident that the problems will be worked out over time and things will return to normal.

**Network:** Despite the abundance of coal as a fuel to produce electricity and our use of best available control technology to burn that coal cleanly, there are still a lot of people who feel we should be doing more to utilize alternative energy sources. What are your thoughts on this topic? And what can Tri-State employees, directors and members do to educate people about the advantages of using coal for generation?

**Thompson:** I am all for alternative fuels so long as they are reliable and cost effective, but I do not

think steering away from coal is realistic. We have a high annual load factor and reliability is crucial. We are a cost-based organization, so anything we do must be justified by the costs.

In the area of education, I think we need to remind people that all of our plants were built with the latest available control technology and any new plants will use the latest control technology. Coal is why we have some of the lowest-cost electricity in the nation. And, we contribute money each year to EPRI and CRN to help fund research into better ways of using coal.

**Network:** It has been suggested that load control and energy conservation could avert the need for much of the costly new generation that is planned for the next 20 years. Do you see Tri-State pursuing those strategies more aggressively in the future or do you feel that this is already being done adequately at the co-op level?

**Thompson:** We definitely need to do as much conserving as possible, but I do not believe that conservation alone will keep us from building new resources. With the growth we are experiencing, it would be impossible to conserve enough to stop building. We always strive to conserve where we can. Of course, we do not have a relationship with the end consumer, so it is up to the member co-ops to pursue conservation with their members.

Tri-State has some energy conservation and efficiency programs that help the members now and we will be discussing more on an ongoing basis. We have recently assigned to one of our board committees the task of pursuing more effective ways to promote conservation and efficiency to our co-op member consumers.

**Network:** Our members are facing rate increases. What are your thoughts on the best approach to conveying that need for rate hikes to member-consumers at the end of the line?

**Thompson:** No one wants rate increases, but everyone wants the power and what it will do for them. I would remind members that before the latest round of building, we enjoyed 16 years with no rate increases and actually had decreases during that period. We will have some increases while we are building, but I believe when this building program is finished we will again enjoy a period of rate stability. I would tell members that by owning and controlling our own assets, we are much better off in the long run. If one looks

around at the cost of everything, electricity is still a bargain. We still have lower rates than most others in the country.

**Network:** When a new board member is seated on the Tri-State board, what are some words of advice that you might offer him or her based on your extensive experience as chairman and a co-op board member?

**Thompson:** The best advice I could give is to sit back for a while and learn what is going on and why decisions are made the way they are. There is a lot of wisdom around Tri-State — on the board, from management and employees, and in the member systems. A lot can be learned just by talking and listening to them. I would also advise them to be independent, ask questions and keep educated on the issues facing us.

**Network:** What are some of the most time-consuming duties of being chairman of the board? What do you like about it? What are aspects of the job that you find less attractive? How has the role of chairman changed over the last two decades?

**Thompson:** I suppose the most time-consuming job is meetings, preparations for and travel to meetings. Some of the least attractive aspects are travel and being away from home too much.

I am lucky in that I enjoy all aspects of the job. The thing I enjoy most is being able to work with and learn from some very smart people and just meeting the good people in the cooperatives in general. I have developed friends all over the country through Tri-State.

There has not been all that much change in the chairman's role except for our size. We have more members to interact with, more interested parties and more assets to keep up with. We attend more non-cooperative meetings than there were when we were smaller and not growing as much. We have always had good directors and members to work with and that has not changed.

Board chairman Hub Thompson (left) enjoys a jovial moment with his colleague Tony Casados (center) and former board member Darryl Stout.





# Springerville 3

goes commercial after 33 months

Story by Charlie Powell

Photos by Charlie Powell and Jonathan Thornton

*With Tri-State's critical need for new generation at the top of the list of items the board and senior management staff are focusing upon, the news of the Springerville Unit 3's official commercial startup at the end of July brought kudos, congratulations and relief.*

Tri-State staff worked closely with project contractor, Bechtel Power Corp., under an accelerated schedule to achieve commercial operation of Springerville Generating Station's Unit 3 in just 33 months — five months earlier than the originally scheduled date. Despite the ramped up time frame, the project was completed under budget and construction crews put in more than 4.1 million hours on the project without a single lost-time accident.

Springerville Generating Station, located in eastern Arizona and operated by Tucson Electric Power, is now a 1,178-megawatt generating facility with the addition of Tri-State's 418 megawatt generator to the two original 380-megawatt units at the plant site.

With much of the region's transmission paths heavily constrained, this project was particularly attractive to Tri-State because adding the new unit at Springerville required no new transmission lines be added or upgraded to move the power to its loads in New Mexico and north into western Colorado. By contrast, Tri-State is currently in the



preliminary stages of developing up to 1,000 miles of transmission lines in eastern Colorado and Western Kansas to improve service to existing member systems as well as provide new interconnections for new generation in the region.

Springerville Unit 3 uses low sulfur coal to fuel its boiler. The coal is delivered by rail from mines in the Powder River Basin of northeastern Wyoming. The boiler will burn about 35,000 tons of coal each week.



Under contract agreements, Tri-State, as the lease holder of the unit, is taking 418 megawatts of capacity from the unit and selling a portion of its output to two other utilities. Tucson Electric will purchase up to 100 megawatts of capacity for up to five years and Phoenix-based Salt River Project will purchase 100 megawatts of output from the unit over a 30-year contract.

*Top left:* The western-most unit at the left of the photo is Springerville Unit 3, which began commercial operation on July 28, 2006.

*Center:* Tri-State's new unit is equipped with two coal-delivery systems in the event of an equipment malfunction. Shown is the alternate coal supply system.

*Above:* The Springerville Unit 3 control room.

*Background:* Batteries of cylinders contain large fans called cooling towers. They are used to remove the heat absorbed in the circulating water used inside the plant.

## Focus on community ...



*It's dinner time! Burlington, Colo., resident Dick White is about to lift the lid on his Dodge City beef pot roast, with approval from wife Mary. For the eighth year in a row, Tri-State member Mountain View Electric Association has sponsored the Touchstone Energy® Dutch Oven contest at several Touchstone Energy Colorado county fairs in northeastern Colorado. The Whites, who won the overall prize, were one of 10 teams who participated in the contest held at the Lincoln County Fair in Hugo in early August.*

*Sponsorships, scholarships and other community programs are just a few of the many ways Tri-State member cooperatives keep connected with their communities and the members consumers they serve.*

## In our next issue ...

*As the unofficial motto of New Mexico — "Red or Green?" — chile is a thriving industry for the state's farmers. In the winter issue of Network, we'll get a taste of this hot crop from the Land of Enchantment.*

WINTER



## Service area scenic

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### *Autumn in Telluride*

Colorado's glittering aspen leaves are mesmerizing as you drive through one of the many scenic mountain passes throughout the state. In southwest Colorado, it's hard to miss this magical time of year.

Tri-State member system San Miguel Power Association based in Nucla, Colo., provides power to residents, farms and businesses in portions of Dolores, Hinsdale, Mesa, Montrose, Ouray, San Juan and San Miguel counties. It also has district offices in Ridgway, Telluride and Silverton.

SMPA crews maintain 1,784 miles of line through some of the most rugged terrain in Colorado, including the world's highest energized structures.

# NETWORK

M A G A Z I N E

Tri-State Generation and Transmission Association, Inc.  
(303) 452-6111  
1100 W. 116th Avenue  
Westminster, CO 80234

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