

# NETWORK

Spring 2010



Hub Thompson's vision, leadership and courage



**TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.**

A Touchstone Energy® Cooperative





# NETWORK

Spring 2010

*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.tristategt.org](http://www.tristategt.org).*



- Mac McLennan**  
Senior Vice President, External Affairs
- Lee Boughey**  
Senior Manager, Communications & Public Affairs
- Jim Van Someren**  
Communications Manager
- Charlie Powell**  
Communications Editor
- Nicole Carlson**  
Communications Specialist
- Trina Van Patten**  
Designer
- Lisa Sowell**  
Photographer
- Jonathan Thornton**  
Media Support Specialist

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Your comments and suggestions are always welcome. Contact editor Charlie Powell at [cpowell@tristategt.org](mailto:cpowell@tristategt.org) or call 303-254-3137.



General Manager's message

## Hats off to our board chairman

**Ken Anderson**  
Executive Vice President/General Manager

Some observers might deduce that the backbone of the electric cooperative program is a series of power plants that dot the landscape and a network of transmission and distribution lines that criss-cross the countryside. While it's true that those are the basic components that produce and deliver the electrons, it's my opinion what truly provides the power and strength of the cooperatives are its people.

Throughout the storied history of the rural electric program, there are innumerable accounts of the invaluable contributions of the great men and women who in one way or another have left an indelible mark and a lasting legacy.

During our nearly 60 years of existence, we've had our fair share of electric co-op "heroes" here at Tri-State, but it's hard to argue that anyone has had more of an impact than soon-to-be-retired board chairman, Hub Thompson.

Since first joining the Tri-State board in 1981 – and being elected its chairman in 1984 and each consecutive year following – Hub has completely dedicated himself to the association, our member system co-ops and the overall cause of the rural electric program nationwide. Over the 30 years he has spent as an electric co-op director, his purpose has been unwavering and his commitment unquestioned.

Although I have had the privilege of working under his direction for just a few short years – having first joined Tri-State in 2005 and being named to my current position two years ago – I was already somewhat familiar with Hub and his influence at Tri-State and across the country. That's because his reputation as a hands-on, tenacious leader had already been spreading throughout the electric co-op community nationwide.

Part of that was due to the fact that while under Hub's leadership, Tri-State had been through some epic challenges, first in the mid to late 1980s when an investor-owned utility attempted a takeover of a member co-op in Wyoming, fol-

lowed by the acquisition of one neighboring G&T in 1992 and a merger with another in 2000 — both of which were monumental undertakings.

The case in the 1980s involved an unsolicited buyout offer of one of Tri-State's members, Shoshone River Power of Cody, Wyo., by another utility in the state, what was then known as Pacific Power & Light. Along with Tri-State's senior staff and outstanding legal team, Hub personally spearheaded the fight to resist the takeover. Ultimately those efforts paid off, as the result a four-year legal battle favored Tri-State under a precedent-setting ruling that to this day preserves the sanctity of the all-requirements power contract G&Ts have with their member systems.

It's probably a safe assumption that the Colorado-Ute acquisition and the merger with Plains Electric may not have been accomplished without Hub's determination and patience. Both processes took a lot of time, effort and extensive negotiations. They also required a significant amount of personal, face-to-face interaction with representatives from the various organizations involved. Again, it was Hub who led the charge on Tri-State's behalf, eventually achieving successful outcomes to benefit the association, our member co-ops and ultimately the consumer at the end of the line.

Those, of course, are just some of the major milestones we've experienced here at Tri-State under Hub's time in office. In a period spanning nearly three decades, there have been myriad decisions, events, activities, projects and comings and goings in which he completely immersed himself.

I'm confident in saying that Hub has justly earned the respect and admiration of his fellow Tri-State directors, local co-op directors across our four states, representatives from the numerous related regional and national organizations with whom he has interacted and the countless number of Tri-State employees that have worked here during the course of his career. For all of us whose paths he's crossed, let me offer a simple thank you.

*Hub has completely dedicated himself to the association, our member system co-ops and the overall cause of the rural electric program nationwide.*

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*75 years old and still going strong; a look at how electrification has changed the lives of millions.*



Cover: Tri-State's board chairman Hub Thompson bids adieu after nearly 30 years of service to the electric cooperative cause.

# Hub Thompson's lasting legacy

Story by Jim Van Someren



*"Totally committed to the electric co-op program."*

*"A born leader."*



*"Tenacious and stubborn — in a good way."*



Those are some of the words and phrases used by fellow electric cooperative directors when asked to describe Harold "Hub" Thompson, who, after dedicating nearly 30 years of his life to the rural electric program, has decided to retire following Tri-State's 58th Annual Meeting in April.

Thompson's service to the Tri-State board — which began in 1981 — is surely going to be difficult for anyone to duplicate anytime soon. That's because he is putting the final touches on 26 consecutive years leading the board as its chairman, having first been elected to the post in 1984 and then every year since through 2009 (as the officer positions on Tri-State's board are set as one-year terms).

Not only is Thompson retiring from his position at Tri-State, but he's also giving up his seat on his local electric co-op board, High Plains Power (Riverton, Wyo.), where he has served as a director since 1980. At that time, the co-op was known as Hot Springs REA; it merged with nearby co-op Riverton Valley REA in 1997 to form High Plains.

Obviously a lot has transpired over the years under Thompson's leadership, with Tri-State having grown significantly in terms of membership, operating responsibilities, resources, energy sales, assets and employee base. "Operationally, the acquisition of Colorado-Ute in 1992 and the merger with Plains in 2000 were two of the biggest milestones during my tenure," Thompson said.

No doubt, those two transactions have had the most impact on the association. But Thompson also was instrumental in another milestone event in the mid 1980s, when Tri-State was forced to protect the sanctity of the all-requirements power contract when an investor-owned utility attempted to take over one of the G&T's Wyoming member co-ops.

"Our successful defense in that case was probably one of the most monumental and long-lasting triumphs, given its precedent-setting nature at the time," Thompson explained. Indeed, not only did that first-of-its-kind case preserve the validity of the all-requirements contract for G&Ts across the country, but to this day it serves as a cornerstone of the electric co-op business model.

"I think you would be hard pressed to find anyone else in the country who's had more of an impact on the generation and transmission cooperatives nationwide than Hub has," said Tri-State director Rick Gordon, who has served as the board's vice chairman since 1997.

Throughout his career, Thompson's influence and contributions have been evident not only within Tri-State's service territory, but on the national stage as well, while serving for many years on NRECA's power and generation committee and in several other key roles. His accomplishments have been duly recognized over the years, too, having been bestowed numerous national and regional awards — including NRECA's highest honor, the Clyde T. Ellis award in 1993.

Despite all the achievements and accolades, Thompson says the thing he'll remember most are the people he has come to know over the past three decades. "By far the most rewarding aspect over the years has been the chance to work side-by-side with some of the finest people I'll ever meet," he said. "There is not enough gratitude to thank everyone involved for making my time at Tri-State a great experience for me and my family."

*As board chairman for the past 26 years, Hub Thompson has led Tri-State through numerous milestone events. He has decided to write the final chapter of his illustrious rural electric co-op career, timed in conjunction with the association's 2010 annual meeting. Beyond that, "Tri-State will continue to grow and prosper," he said.*

*Retiring board chairman leaves indelible mark on Tri-State and the rural electric program.*



# Brighter Bites

Story by Nicole Carlson  
Photos by Steve Collector

## Small-town grocery store thinks big with energy efficiency measures

three grocery stores in the association's service territory, including Valley Foods. Due to its success, the LED-refrigerator light program, which allows for a credit of \$60 per door for up to 50 doors per customer, is continuing in 2010. With an average cost of \$250 per door, the association is picking up almost 25 percent of the costs.

"We appreciate what Tri-State did for us with the rebate check," said Lamprecht.

Parrie and Lamprecht anticipated an annual energy savings of more than \$750 as a result of the new freezer units. Although the installation only took place last fall, the business has already seen significant reductions in energy costs.

"The kilowatt-hour usage has definitely gone down since the installation of the new units," said Parrie. "In fact, in January the store used 3,000 kilowatt-hours less than the same month a year ago."

Beyond a decrease in energy consumption, sales

in the frozen section have increased 15 percent since October.

"The LED lighting really makes the products jump out at you," said Lamprecht. "There is also no fogging, which was a problem with the old system. The new units really did make a big difference. Our customers just love them."

In addition to replacing the refrigerator case units, Lamprecht is taking further measures to increase energy efficiency, including the installation of other new lighting. Future plans include working with CP&L to install LED-lit food cases and an upgrade to the beer case.

"From a co-op standpoint, the more money saved on energy, the more the store can contribute to the economy and overall growth of the town," said Parrie.

The partnership between Valley Foods and Carbon Power & Light is a testament to the co-op's goal of learning, leading and lighting the way to a better quality of life for the co-op's member-owners.



Above: Valley Foods owner, Tim Lamprecht visits with one of his regular customers.

Nestled in the North Platte River valley in southeastern Wyoming, the quaint town of Saratoga boasts some of the best trout fishing in the West. The small town, population of approximately 1,250, also sits atop one of the most active mineral hot springs in Wyoming, creating many natural hot spring pools scattered throughout the community. These attributes, in addition to the small-town charm and welcoming residents, draws visitors from around the country to Saratoga.

On the southern edge of town, both guests and residents alike gather at the community's lone grocery store – Valley Foods. As a cornerstone of the community, Valley Foods serves as more than just a place to buy groceries.

"In Saratoga, as is the case with most small towns, the grocery store is the meeting spot," said Valley Foods owner Tim Lamprecht. "People congregate here."

It is seemingly appropriate then that a recent upgrade to the business's freezer units was the talk of the town. The project, a joint venture of Valley Foods and Carbon Power & Light, involved the installation of the new units, which feature LED-lighting technology. While using less energy than traditional fluorescent or incandescent bulbs, the LED lighting technology introduces very little heat into the refrigeration system, which is an additional benefit.

"Energy is one of our highest expenses," said

Lamprecht. "We obviously need it, but I would like to curb it as much as possible."

As a pioneer advocate for energy efficiency, Lamprecht was planning last year to replace Valley Foods' antiquated freezer cases with newer models, with the help of a USDA grant. However, when Tri-State introduced LED-lighting for refrigeration as part of its EEC program, it was a perfect match for the project.

"Tri-State's program couldn't have been introduced at a better time," said Joe Parrie, Carbon Power & Light member services director.

The old freezer units were 1970 vintage, installed when the store was built in 1981. Lamprecht purchased the business in 2000. Since his acquisition of Valley Foods, Lamprecht has completed more than \$500,000 in upgrades. However, no change has resulted in more comments than the freezer case renovations.

"The customers were really excited about it," said the grocer. "It took about a week to complete the installation and during that time, they would stop by to check out the progress. It was the talk of the town."

Tri-State contributed more than \$2,100 for the project through its Energy Efficiency Credits program. According to Tri-State member services coordinator Keith Emerson, the LED lighting retrofit for refrigerator case doors, which was introduced as a pilot program last year, assisted in the installation of LED-lighting technology in refrigerator units in



Valley Foods' new LED case lighting is one way energy-intensive businesses like grocery stores can reduce operating costs.



Below: Lamprecht (left) and Joe Parrie, CP&L's member services director, pose in front of the upgraded freezer cases.

# Wyrulec holds its first ENERGY SEMINAR

Story and photos by Charlie Powell

With the help of Tri-State's member services group, Tri-State member co-op Wyrulec Co. (Lingle, Wyo.) held its first energy seminar in its nearly 75-year history in February at the Goshen County Fairgrounds in Torrington, Wyo.

The free, half-day conference and energy expo on Feb. 9, offered program attendees a first-hand look at displays and demonstrations of energy-saving electric technologies such as heat pumps, electric thermal storage heating, super-efficient Marathon electric water heaters, LED-lighting displays provided by Tri-State and an infrared camera for detecting heat loss. For those seeking information, there were plenty of experts on hand to offer the latest data on federal, state and local programs

that could help then uncover the maximum savings on energy conservation measures at their homes and businesses.

Presentations on the Energy Efficiency Credits (EEC) program and highlights of some advanced technologies entering the marketplace were provided by Tri-State's Mike McCoy. Barry Gooding of Steffes Company explained the benefits of electric thermal storage (ETS) heating. Tiger Adolf, with the Wyoming Energy Council, outlined her organization's home energy performance programs and shared some useful tips on finding qualified contractors in the state. Gary Hoffman, with the Western Area Power Administration (WAPA), presented some tools that are useful and available for do-it-yourselfers interested in performing home energy audits.

Jerry Tamlin, with the U.S. Department of Agriculture's Rural Development office in Casper, discussed several loans and grants that are available to Wyomingites interested in low-cost financing for energy conservation improvements and Wyrulec manager Rollie Miller introduced speakers and capped off the program with specifics on the co-op's energy incentive programs and an update on the features of Wyrulec's automated metering system.



McCoy kicked off the afternoon program with a brief presentation on different heating and cooling technologies used in residential applications. The senior engineer stressed that despite the fact that electric costs per million BTUs (British Thermal Units) currently exceed the costs of natural gas and propane, that doesn't necessarily mean you'll save money using those cheaper fuels to heat your home. "If you heat your home with a 97 percent efficient gas furnace, it will still end up costing you more money in energy costs compared to a 200 percent efficient electric air-source heat pump. And, that same heat pump will provide you with air conditioning in the summer," said McCoy.

Gooding, with the Dickinson, N.D.-based Steffes, characterized his company's ETS units as a "box of rocks" that provide off-peak heating used in conjunction with a time-of-day rate. Under the off-peak rate scenario, the ETS units take advantage of a lower tier off-peak rate by heating the bricks inside the units using electric elements during the less expensive off-peak periods and exhausting the stored heat in the bricks during the higher-cost peak periods of the day.

Although Wyrulec doesn't currently offer its consumers off-peak rates, many Tri-State members do and some of these co-ops sell, install and maintain the Steffes ETS units for their consumers.

A neighboring Wyoming member co-op, Wheatland REA (Wheatland, Wyo.), completed one of the state's largest ETS unit retrofits last year at a school in Chugwater. The installation included a total of five commercial ETS units adding up to 378 kilowatts of output, which heats the school's boiler

system. The new ETS system has already saved the Chugwater school district more than \$7,300 in heating costs compared to a conventional boiler system during its first four months of operation, according to Al Teel, member services manager at Wheatland REA.

Another popular product among co-op consumers is the Marathon water heater distributed to Tri-State member co-op locations by Brighton, Colo.-based Western United Electric Supply co-op. Russ Nelson, who works for the co-op-owned electric equipment distributor, discussed the advantages of the unique, super insulated Marathon water heaters, which qualify for incentives under the member and Tri-State-sponsored EEC Program. "Because of the unit's extensive insulation they only lose 5 degrees in temperature over a 24-hour period, and the tanks are guaranteed for life," said Nelson.

A recent addition to the Rheem (manufacturer of Marathon heaters) lineup of energy products is the heat pump water heater, the only water heater that qualifies for the Department of Energy's Energy Star® rating. The heat pump water heater is currently being field-tested as part of Tri-State's EEC new technologies pilot incentive program.

Tiger Adolf of the Wyoming Energy Council offered an overview of some of the many state and federal programs that are available to help consumers tap into the nearly \$5 billion that has been earmarked for weatherization. "Your cheapest energy is the free energy you save by sealing up your home against energy leaks," she stressed. "Do that first before moving on to more efficient appliances or expensive heating systems."

WAPA's Gary Hoffman demonstrated the infrared camera that detects heat — whether it is a door or window that is leaking air to the outside, or for use by utility personnel inside a substation, where faulty equipment that is about to fail may be generating an abnormal heat signature. A watt-meter can be plugged into various household appliances to help consumers determine where their energy dollars are going. Hoffman said that their research found that some older refrigerators can cost as much as \$25 per month in electricity compared to an Energy Star® model that might only cost \$6 a month.

Miller said that he was pleased with the response he received from the co-op's first energy seminar and expected to host more events on this topic as a growing number of Wyrulec consumers seem to be interested in finding ways to use energy wisely and take advantage of the many incentives offered by the co-op, Tri-State and local, state and federal agencies.



**"The cost of fuel doesn't tell the whole story. A 97 percent efficient gas furnace will still cost you more than a 200 percent efficient electric heat pump."**

— Mike McCoy



Weatherization kits were provided to all attendees of Wyoming's energy seminar, courtesy of Tri-State.



A co-op member services employee makes adjustments to a consumer's ETS unit.



Most energy efficiency experts will stress that a couple of tubes of caulk go a long way toward providing big energy savings in the home.



Tri-State's Mike McCoy (left) sets up an LED lighting display at Wyrulec's first energy seminar held in February in Torrington, Wyo.



# Rural Electrification

*Still lighting the way after 75 years*

**A**s modern Americans, we most likely begin our day by arising to the sound of an electric alarm clock as our electric coffee maker, set on a timer, begins brewing our daily cup of joe. As the smell of the coffee entices us to leave our warm beds, we probably flip a switch to turn on a light, not once during these actions recognizing the benefit of electricity on our daily lives. But, it was not so very long ago that a morning routine involving electricity was considered a luxury for the many men and women living in rural America.

In the 1930s, electricity in the home was a reality to only 10 percent of those residing in rural America, compared to 90 percent of their urban counterparts. At that time, private utility companies were opposed to supplying electricity to those living in rural areas due to the comparative high cost of serving low density areas.

The administration of President Franklin Delano Roosevelt disagreed with the private utilities, instead believing that affordable electricity in rural America would improve the standard of living and the economic competitiveness of the family farm. Roosevelt also believed that if private enterprise could not supply electric power to the people, then it was the duty of the government to do so.

Based on these presumptions, President Roosevelt signed an executive order establishing the Rural Electrification Administration (REA) as an independent federal bureau on May 11, 1935. As one of the key pieces of Roosevelt's New Deal initiatives, the creation of the REA was the first step in ensuring electrification for rural America.

The duties and functions of the REA, according to the executive order, were to "initiate, formulate, administer and supervise a program of approved projects that would bring generation, transmission and distribution of electric

energy in rural areas." Basically, the REA would provide loans and other assistance so that rural cooperatives could build and run their own electric distribution system.

While the Roosevelt administration established the REA in 1935, an experiment completed in Minnesota 12 years earlier involving the delivery of electricity to nine farms laid the initial groundwork for rural electrification. The study concluded that rural electrification was economically feasible and the results were influential in the government's decision to support rural electrification. It was this study that also paved the way for the first official action of the federal government pointing the way to the present rural electrification program, with the formation of the Tennessee Valley Authority (TVA) in May 1933. This act authorized the TVA board to construct transmission lines to serve those farms that did not have access to electricity.

Many groups opposed the federal government's involvement in developing and distributing electric power, especially utility companies, who believed that the government was unfairly competing with private enterprise. Some members of Congress believed the program would bring the nation a step closer to socialism, while others believed that farmers simply did not have the skills needed to manage local electric companies.

In addition to lighting the homes of the farmers, the delivery of electricity to rural America allowed for mechanization of many farming operations, such as threshing, milking and hoisting grain for storage. Electricity allowed for greater productivity at a reduced cost, which was especially advantageous in areas facing labor shortages.

In 1936, the United States Congress authorized the Rural Electrification Act and in 1939, the program was reorganized as a division of the

U.S. Department of Agriculture. By that same year, REA had helped to establish 417 rural electric cooperatives, which served 288,000 households — doubling the number of farms using electric service in the United States since 1935. By 1953, more than 90 percent of U.S. farms had electricity service — a demonstration of REA's success.

Today, nearly 99 percent of U.S. farms have electric service, most as a product of locally-owned rural electric cooperatives that got their start by borrowing funds from REA. However, even in modern times, struggles continue for rural electrification, including strained transmission lines and the pending rising costs of electricity due to potential climate legislation. While no one knows exactly what the future will bring for rural electrification, based on its long and tenacious history of championing basic services for rural consumers, it is probably a safe bet that the rural electric program will still be going strong in another 75 years.



*The pioneers of electrification have brought big changes to rural America over the past 75 years. Photos printed with permission of NRECA.*

## Focus on community



### Lighting the way in our members' communities

*Tri-State has extended its commercial lighting pilot project in 2010, which has helped shed brighter and more efficient lighting on several co-op-served communities. The program is part of the association's Energy Efficiency Credits program that has helped a number of communities served by its electric co-ops upgrade their street light systems to energy-saving, low maintenance light-emitting diode systems (LEDs). Pictured is the scenic mountain town of Ouray, Colo., served by Tri-State member San Miguel Power Association. This project was completed in 2009. In 2010, Tri-State is assisting La Plata Electric install similar cutting-edge street illumination in the Durango, Colo., historic district and plans are also in the works to retrofit downtown lighting in Buena Vista, Colo., with support from local electric co-op Sangre De Cristo Electric Association.*

SUMMER

### In our next issue ...

*Two long-anticipated events expected to commence in the approaching months are the construction of Colorado and New Mexico renewable energy projects, from which Tri-State will purchase long-term generation. The 51-megawatt Kit Carson Windpower Project will be constructed near Burlington, Colo., by a subsidiary of Duke Energy Corp. Tri-State's first solar investment will soon be taking shape on a 250-acre parcel of land in northeast New Mexico near the towns of Cimarron and Springer. The 30-megawatt Cimarron 1 Solar Project will be constructed by First Solar, Inc. Learn more about these projects in our next issue.*

# NETWORK

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

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## Service area scenic

### *Winter travels in Northern Colorado*

During Colorado's winter months, traveling from Walden to Fort Collins on State Highway 14, offers spectacular views of snowcapped mountains, winter vegetation and various forms of wildlife. Despite the route being on the Continental Divide, Highway 14 through Cameron Pass can be one of the more reliable routes across Colorado's Front Range Mountains in snowy weather.

Just east of Walden, travelers along the highway can take in a scene of the Medicine Bow Mountains, which border on the territories of Mountain Parks Electric, Inc. (Granby, Colo.) and Poudre Valley Rural Electric Association (Fort Collins, Colo.). From the northern end of Colorado's Never Summer Mountains, the Medicine Bow Mountains extend north from Cameron Pass along the border between Larimer and Jackson counties.

In addition to the scenic landscapes, wildlife abounds in the mountains along Highway 14, with mule deer, elk, moose, black bear, mountain lions, coyotes, marmots, Richardson's ground squirrels, bobcats, and lynx as well as a tremendous variety of birds being visible even from the road. Anglers enjoy fishing for brook and rainbow trout as well as grayling and golden trout.