Current Issues

A Consumer's Guide

SAN LUIS VALLEY
RURAL ELECTRIC CO-OP

A Touchstone Energy® Cooperative
The power of human connections®

A Message from San Luis Valley Rural Electric Cooperative's CEO

In the world of business, electric cooperatives are unique. Cooperatives are formed by the people they serve. That was the case when a group of far-sighted individuals decided to work together to bring electricity to rural areas in the Valley.

This group formed an organization to bring electricity at the lowest possible cost to those who didn't already have access to power. SLVREC has held true to that vision since 1937.

Challenges: Then and Now

Many challenges faced the fledgling organization. SLVREC had to start from the ground up: signing up members, finding and training employees, and building a distribution network. It was a daunting challenge.

Challenges no less daunting face the cooperative today. Across the nation, cooperatives like SLVREC agree we must reduce our dependence upon foreign oil and fossil fuels and reduce greenhouse gasses. We agree we must develop low-emission, renewable energy sources to protect our planet and our climate.

At the same time, as cooperatives, we are obligated to make decisions with our member's interests in mind. For SLVREC, that means delivering reliable power to our members with the lowest possible affect on their bills.

Unfortunately, the goal of keeping bills down often conflicts with the goal of becoming less dependent upon fossil fuels. The energy industry must strike a balance between coal and renewables—a balance that makes sense economically and technologically.

Many Americans only hear part of the story about adding renewable energy to our nation's energy portfolio. The news coverage portrays electric cooperatives and other utility providers as being against renewable energy.

That's simply not true. The truth is, adding renewable energy generation while keeping electricity reliable and affordable is an incredibly difficult challenge.

A Reality Gap

In spite of news reports that indicate otherwise, there isn't an inexpensive way to develop new generation—renewable or non-renewable.

As much as we would like to have the capability to store mass amounts of electricity, a fully operational technology to do this has not been developed. For the most part, wind generators and solar plants only provide power when the wind blows or the sun shines. We rely on baseload generation from coal and natural gas generation plants to provide power at all other times.

Glenn English, CEO of the National Rural Electric Cooperative Association (NRECA), terms the discrepancy between what people want utilities to deliver and what utilities actually can deliver a "reality gap."

He said, "Much of the public and Congress believe that there can be a silver bullet that will suddenly take care of this issue. … That is not reality. If we are going to reduce carbon emissions in this country in the electric utility industry, there are going to be many solutions, not a single solution. They are going to be difficult solutions and they will take time to implement. And in fact, in many cases, the technology does not exist today for us to do what many would ask us to do."

What Comes Next?

State and federal legislators put forth bills on renewable energy every year. Coloradans are being asked to use electricity more wisely. Proponents of solar power are looking at the Valley. As a voter, and as a member of SLVREC, you will be asked to make some tough choices.

As CEO of SLVREC, I believe it is my duty to offer you the information you need to make wise choices. My goal is providing you with accurate information—straight talk—to help you make well-informed decisions about your future. In this booklet, we've done our best to offer facts about the current issues facing the electric industry.

Are we biased? Yes. But our bias is for the Valley and our members. That's what being an electric cooperative is all about.

John R. Villyard

Why You Should Read this Guide

As our nation moves to become more independent of foreign energy sources and fossil fuels, the utility industry will undergo many changes. There is no doubt about this.

As a citizen, you will be asked to vote on legislation concerning these changes. As a member of SLVREC, you will be asked to vote for directors who best represent your concerns.

We believe understanding the complexities of the energy industry will help you make informed choices at the voting booth at every level. Through this guide, we offer you information to assist you in making decisions regarding the energy industry and to help you provide meaningful input to your elected officials.

From the cooperative's perspective, reporting on energy issues in the news does not always seem impartial or complete. In this booklet, we have tried to provide information in a fair and balanced way to help you make wise choices.

We encourage you to take the time to read through this guide. If you feel we have omitted important information or have misrepresented a topic, please let us know.

We encourage you to make your voice heard through both your elected board of directors and through the phones and mailboxes of your state and federal representatives.

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A special edition prepared for *Newsboy* suscribers

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Photo: Sandia National Laboratories

Types of Utilities

Utility companies can be described in two ways: by their business structure and by the services they provide. In the simplest terms, who owns the company—member, investor or government—defines the business structure.

Each business type may offer one or more utility service: generation, transmission and/or distribution. For example, Tri-State Generation & Transmission, a cooperative, generates power for its 44 member cooperatives and delivers this power through high-voltage transmission lines to distribution cooperatives like SLVREC. SLVREC, a distribution cooperative, provides electricity to end users. Xcel Energy, an investor-owned utility, provides all three services—generation, transmission and distribution to end users.

History Shapes Utilities Today

Before 1935, few rural areas in America enjoyed electricity. For the most part, investor-owned utilities and municipal utilities served cities and well-populated areas. It was too expensive for these electric companies to extend their lines into sparsely populated rural areas.

In 1935, President Franklin D. Roosevelt created the Rural Electrification Administration (REA). In 1936, Congress passed the Rural Electrification Act to help and encourage rural Americans to organize electric cooperatives in their communities. Cooperatives brought electric power to rural America for the first time. This history has shaped the profile of today's utility companies. Generally, IOUs and municipals serve densely populated areas while cooperatives serve more sparsely populated rural areas.

Today, cooperatives provide service to 12 percent of the country's population. They own and maintain 2.4 million miles, or 43 percent, of all electric distribution lines in the U.S. Yet, among utilities, growth is highest for cooperatives because many once-rural areas are being developed.

SLVREC provides service to just under 12,000 meters in the San Luis Valley. In Colorado, Xcel Energy is the largest IOU, serving over 1.3 million customers in the state and about 16,500 meters in the San Luis Valley.

Cooperatives

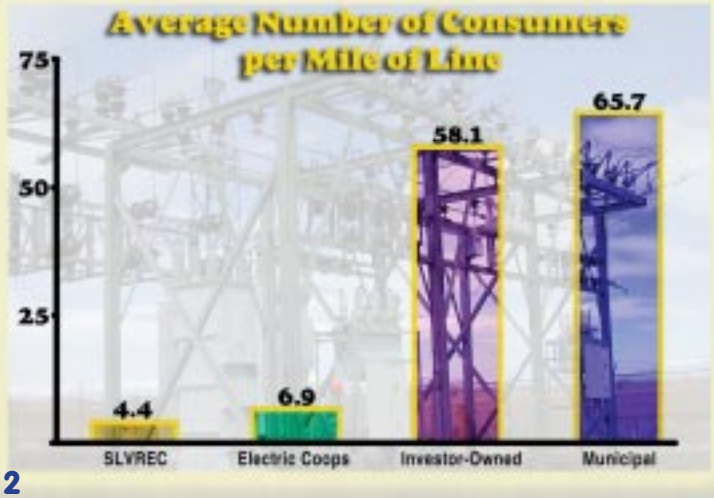
- Owned by the members they serve.
- Not-for-profit—rates cover operating costs.
- Governed by decisions made locally by a board of directors elected by the membership.
- Revenues collected in excess of costs are used as operating capital. Over time, these revenues are returned to members as patronage refunds or capital credits.
- Not exempt from paying taxes; however, because they do not operate to make a profit, they have no taxable income. Cooperatives do pay property taxes, vehicle registration fees, sales tax and other taxes.
- Colorado Public Utilities Commission (PUC) has partial regulatory control over electric cooperatives.

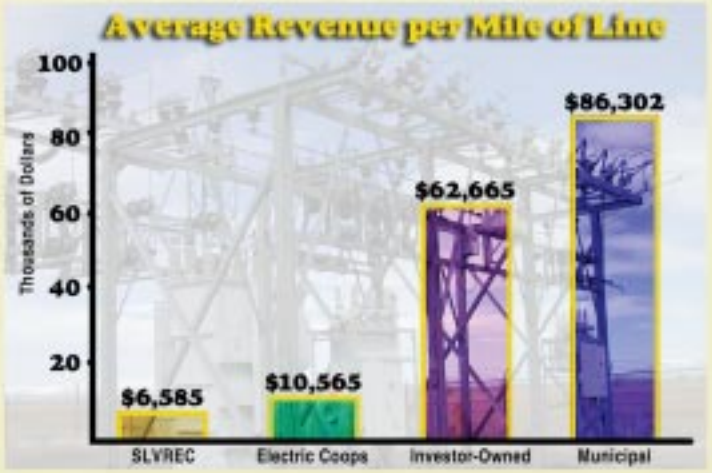
Investor-Owned Utilities (IOU's)

- Owned by stockholders who may or may not live in the utility distribution area.
- Rates cover the cost of operation and a profit margin.
- Pay taxes according to state and federal corporate tax law. Many take advantage of investment tax credits and accelerated depreciation to reduce tax load.
- Colorado PUC has full economic and quality of service regulatory control over Colorado IOUs.

Municipal Utilities

- Most variable type of utility. May be owned/operated by a city, state or federal agency. Depending upon its structure, consumers have varying degrees of control.
- Municipals many use revenue collected in excess of costs to fund community projects. Alternatively, other community ventures or taxes may subsidize the utility.
- Municipal utility systems may or may not pay local and federal taxes. Operations may be funded through tax-exempt bonds.
- In Colorado, the PUC has partial regulatory control over municipal utilities.





Regulatory Compliance and Safety

San Luis Valley REC places the highest priority on safety. If it is not safe, it is not done. That philosophy encompasses our communities, our members and our employees.

SLVREC views accidents as an unnecessary waste of both human and economic resources. By strictly adhering to safety rules and policies, the cooperative ensures lower insurance rates and keeps lost time from accidents at a minimum.

Being Safe Around Power Lines

Power lines are safe to live and work around if you follow some basic precautions. The most significant risk of injury from any power line is the danger of electrical contact. Electrical contact between an object on the ground and an energized conductor (power line) can occur even though the two do not actually touch.

With high voltage power lines, electricity will arc across a gap. The distance of a potential arc depends upon the voltage at which the line is operated, weather conditions and other factors. Unlike wiring in your home, overhead power lines are not enclosed by an electrical insulating material. Therefore, power lines readily respond to changes in environmental conditions. For example, smoke and hot gasses from fire contain carbon. This carbon can create a conductive path for electricity, allowing electricity to flow from the power lines into other objects.

To avoid accidental electrocution near power lines, avoid bringing yourself, or any object you are touching, close to an overhead line. In other words, do not lift, build or pass anything under a power line that could contact or become energized by the line. That includes any implements, vehicles, tools, construction materials and ladders.

If you have doubts about adequate clearance between yourself, equipment you operate or materials you handle and power lines, contact SLVREC. For a one-time move, servicemen can de-energize a line or install a temporary cover-up over the line to provide an extra margin of safety.

Keep the equipment used to install irrigation systems well away from power lines. When working with tall equipment near a line, assign an on-the-ground safety spotter to warn other workers against unsafe moves. Use extreme caution when moving aluminum ladders near any overhead utility line. If a sprinkler malfunctions and a solid stream of water reaches an energized power line, turn off the water at the source by switching off the pump before trying to fix the sprinkler.

Vandalism

If you see any evidence of vandalism on SLVREC lines, call the cooperative immediately. Vandals not only place themselves in danger; they place other members in danger too. Broken insulators can cause dangerous flashovers and an insulator string hit by gunfire could pull apart and let the conductor fall to the ground. This could be a serious hazard to anyone close to the line.

Damage from vandals may or may not be immediately visible. Wind or rain may cause the line to separate or fall long after the initial damage.

SLVREC asks the public to be alert for suspicious activity near power lines and substations and to report anything unusual to their local sheriff's office or to SLVREC. All reports are confidential. The cooperative offers a $500 reward for any tips on vandalism that lead to a conviction.

Installing Generation Equipment

Are you thinking about installing a permanent back-up generator? How about a net metering system? Call SLVREC first!

Check with the cooperative before installing any connected equipment could feed power back into the cooperative's distribution network. SLVREC will help you comply with the policies and procedures designed to ensure both the safety of employees who work on the system, you, your family and your workers.

Community Programs

SLVREC offers safety programs suited to all ages and experience levels. From the Louie the Lightning Bug program for first-graders to high-voltage safety demonstrations for emergency rescue workers, safety demonstrations are just a phone call away.

Call customer service to schedule a high-voltage safety demonstration for your group, school or organization.

Renewable Energy

Renewable energy will help solve many of our nation's energy and climate concerns. But replacing conventional power generation sources with renewables takes time and money. In some cases, the technology does not currently exist to totally eliminate conventional, non-renewable power generation from our energy mix.

Even so, most utilities currently offer green power programs that allow their consumers to choose power produced from renewable sources. For example, at SLVREC, members who want to rely on renewable energy sources for their power use may do so by signing up for green power. Through this program, members may purchase as few—or as many—100 kWh blocks of power as they choose for an additional fee per block.

SLVREC sends this additional fee to their power provider, Tri-State Generation & Transmission, who in turn uses it to purchase or produce power from renewable energy sources. All power purchased through this program offsets the production of energy through conventional sources.

Within the Valley, abundant sunshine makes solar power the renewable of choice for electric generation. The National Renewable Energy Laboratory rated the Valley as having the best solar power conditions in Colorado. Xcel Energy contracted with Sun Edison to build, finance and maintain an 82-acre solar facility near Mosca for an estimated $60 million. At peak power, the 8.22-megawatt facility will create enough energy to power nearly 1,500 homes per year.

Most large-scale solar developments will require the development of new transmission lines within the Valley. SLVREC is working with Tri-State Generation & Transmission to locate and build a new transmission line to link the Valley to the front range.

On a smaller scale, SLVREC has developed a net metering policy that provides members an opportunity to develop micro renewable energy facilities at their home or business.

Wind Power

Wind energy is one of the fastest-growing forms of electricity generation in the world. The United States can currently generate more than 10,000 megawatts (MW) of electricity from the wind, which is enough to power 2.5 million average American homes. Industry experts predict that, with proper development, wind energy could provide 20 percent of this nation's energy needs.

Pros

- Once the site is determined, the construction can take place rapidly.
- Wind generation costs are stable.

Photo: Sandia National Laboratories

- Wind generators have no air emissions.
- No water is needed.
- After construction, fuel costs to run the facility are negligible.
- Development of wind resources may bring financial gain to some landowners and local economies.

Cons

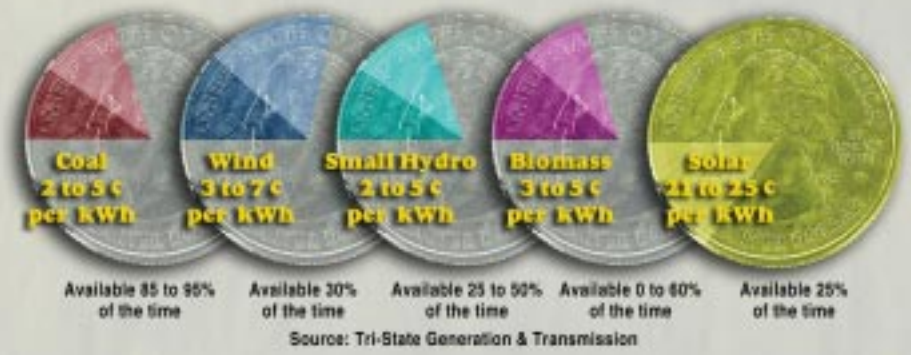
- Difficult to find sites with adequate wind that meet space constraints, zoning codes and proximity to transmission lines.
- Wind is variable and not predictable. When the wind is blowing too hard, or not blowing hard enough, wind machines can not operate and backup sources of generation are needed to keep the lights on.
- Tax credits and incentives are currently required to keep costs of wind power low.

Small Hydropower

To generate power, small run-of-the-river hydropower systems require a water conveyance to deliver water to a turbine or waterwheel that transforms the energy of flowing water into rotational energy. An alternator or generator transforms this rotational energy into electricity. Smaller systems may use batteries to store the electricity generated by the system. However because hydro resources tend to be more seasonal in nature than wind or solar resources, batteries may not be practical for all hydropower systems.

Pros

- Reliable, renewable energy source.
- Minor impact on environment and wildlife.
- Makes use of a local resource, especially if developed at existing dams.



Cons

- Most potential sites are already developed as hydropower facilities.
- Water law complicates site selection and development.
- Less favorable sites are expensive to develop.

Biomass

In biomass energy production, heat conversion turns organic matter into energy. Biomass currently supplies over 3 percent of the total energy consumption in the U.S., mostly through industrial heat and steam production from forest residue and paper mill waste.

Pros

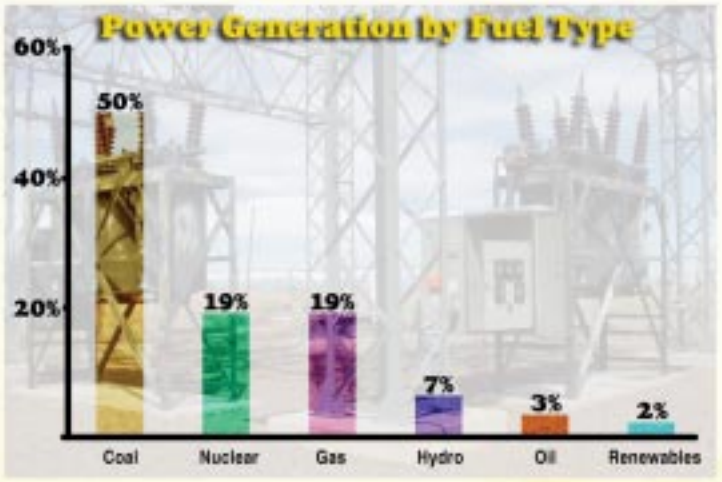
- Closed anaerobic system greatly reduces an operation's environmental impact.
- Odor from methane gas significantly reduced when processed, reducing air pollution.
- Less water used for sewage lagoons.
- By-product is useful as a fertilizer for farmers.
- Helps food growers meet increasingly stringent environmental requirements.
- Improves economies of agricultural operations.

Cons

- Plant efficiencies are in the low 20 percent range.
- Most facilities are small. Ability to produce large amounts of power is limited.

Solar

While the sunshine in the West is certainly abundant and free, the overall power production cost for solar energy runs about 21 cents per kilowatt-hour – approximately three to four times the cost of today's baseload power resources. Although solar technology has advanced since the 1970s, it still is one of the most expensive green power resources on the market today. New technologies, like concentrating solar plants that allow power storage may rapidly move solar technology forward in coming years.



Pros

- No air emissions after facility is in place.
- Do not need water to run.
- After initial construction, fuel costs to run the facility are negligible.

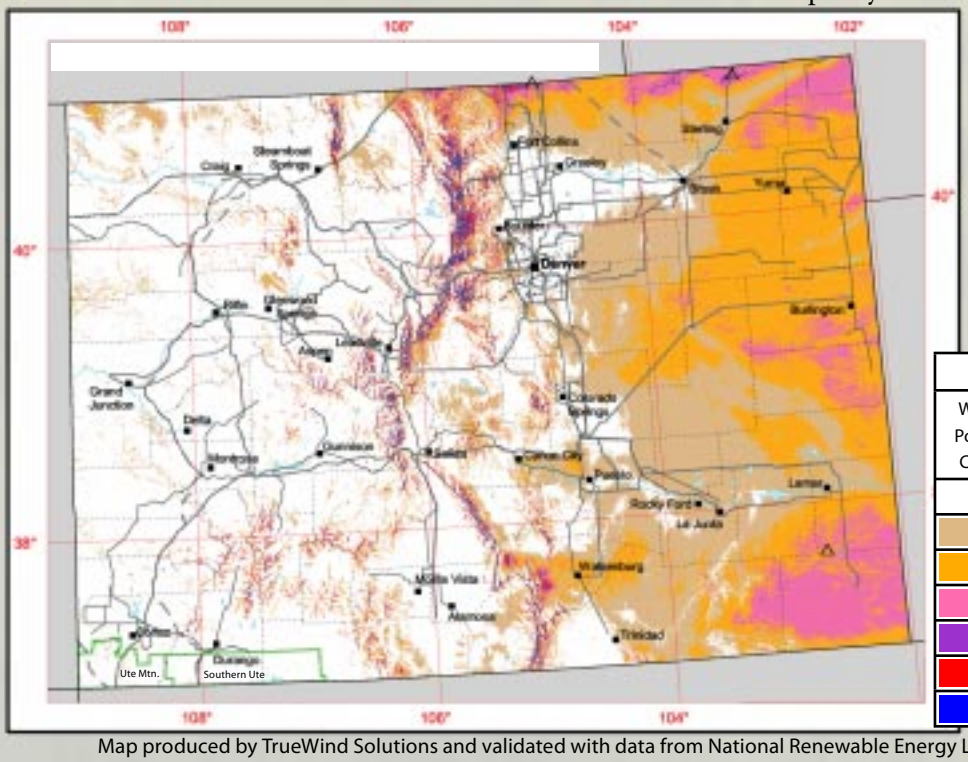
Cons

- Power is only produced when the sun is shining. Operational power storage technologies for utility-scale generation are not fully developed.
- Difficult to find sites that meet space constraints, zoning codes and proximity to transmission lines.

More Than Renewables are Needed

We must add renewables to our power generation mix; but, more than renewables are needed. In Colorado, existing power generation facilities are running at or near capacity. We need more generation capacity to meet our power demand. Until technology catches up, conventional power generation technologies like coal are still needed.

A mix of renewables and conventional power generation will ensure that your power needs can be met by your utility company.



Wind Power Classification

Wind Power Class	Resource Potential	Wind Power Density at 50 m (W/m^2)	Wind Speed at 50 m (m/s)	Wind Speed at 50 m (mph)
1	Poor	0-200	0.0 - 5.9	0.0 - 13.2
2	Marginal	200 - 300	5.9 - 6.7	13.2 - 15.0.
3	Fair	300 - 400	6.7 - 7.4	15.0 - 16.6
4	Good	400 - 500	7.4 - 7.9	16.6 - 17.7
5	Excellent	500 - 600	7.9 - 8.4	17.7 - 18.8
6	Outstanding	600 - 800	8.4 - 9.3	18.8 - 20.8
7	Superb	> 800	> 9.3	> 20.8

Map produced by TrueWind Solutions and validated with data from National Renewable Energy Laboratory (NREL). Source: www.eere.energy.gov/

Distribution and Transmission

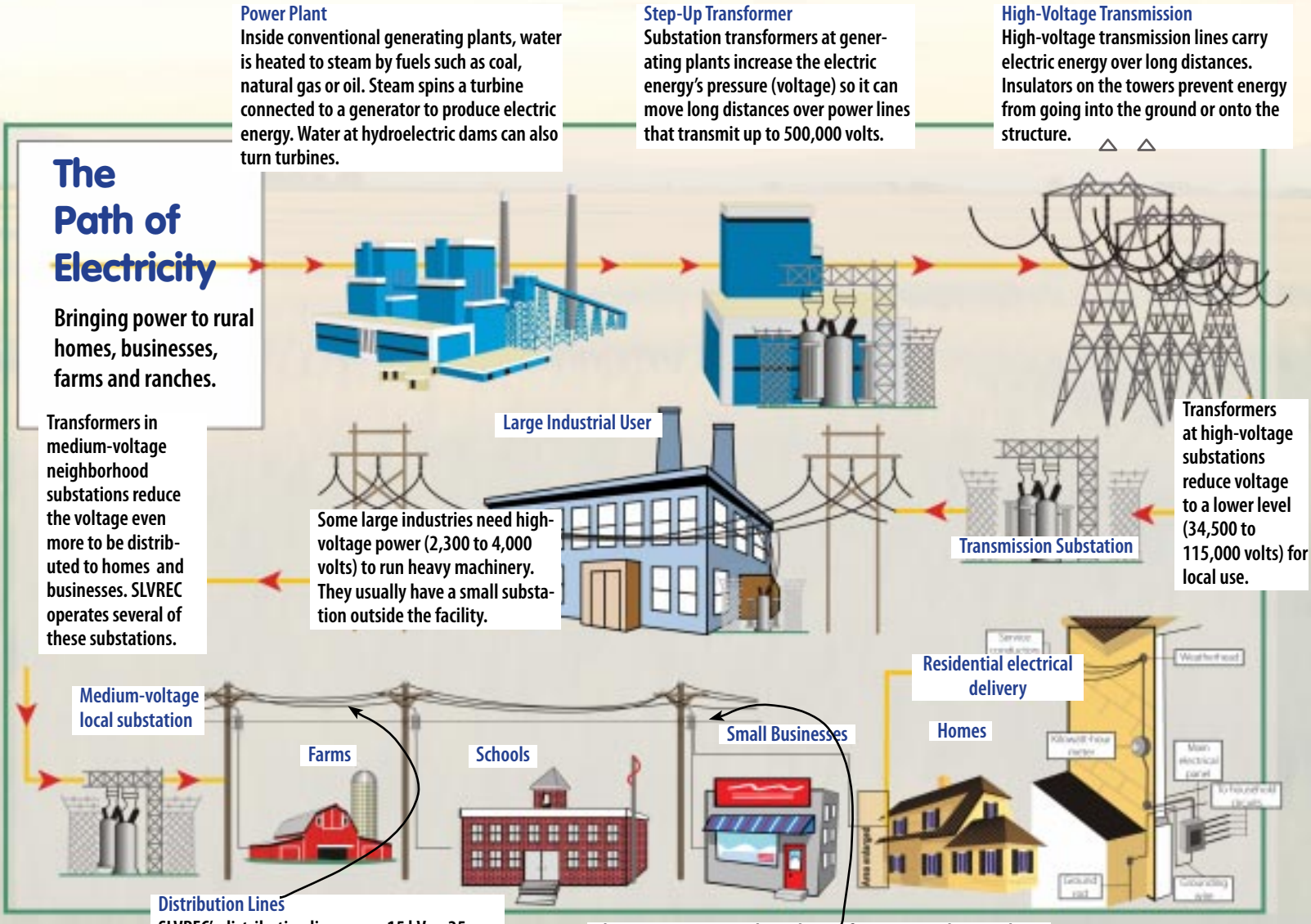
Power lines fall into two main categories: transmission lines and distribution lines. In general, transmission lines carry high voltage power from the point of production to substations where power is stepped down for local use. Distribution lines move power from substations to end users.

The schematic below illustrates the path of power from generation facility to consumer. Initially power travels over high-voltage transmission towers. From there, it reaches substations where it is stepped down for use by consumers depending upon their power needs.

Often people associate large metal towers with transmission lines and wooden poles with distribution lines; but, this isn't always the case. Transmission lines and distribution structures may look much the same, a fact worth noting as Colorado utilities strive to upgrade their electric transmission networks (see photos next page).

New transmission lines are needed to help promote the development of renewable energy. Bruce Smith, executive director of The Colorado Energy Forum, a non-profit education and research organization recently said, "Utilities across Colorado are working together to develop new transmission projects that ensure reliable electric service and further renewable energy development." The organization released a report in August 2007 that found that failure to upgrade the state's system of high-voltage transmission lines could lead to a serious energy situation.

Electricity often travels long distances before reaching your home or business. SLVREC buys wholesale electricity produced at generating facilities owned by Tri-State Generation & Transmission and distributes this power to members through an infrastructure of substations and power lines.



SLV Electric System Improvement Project

Tri-State Generation & Transmission, SLVREC's power provider, has several major transmission line projects in the works including a line that would improve power delivery to the San Luis Valley. Tri-State has cited four key reasons for proceeding with this project. It would:

- Provide necessary transmission support for renewable energy development in the San Luis Valley.
- Improve system reliability.
- Help prevent voltage collapse under peak loads.
- Upgrade the existing transmission system in the San Luis Valley.

SLVREC's members will appreciate the latter three items; all Valley residents will appreciate the first item on this list.

Best Solar Power Conditions in the State

The U.S. Department of Energy has identified the San Luis Valley as having the best solar power conditions in Colorado. Companies are already exploring development of large solar facilities in the Valley. However, these types of facilities require transmission capabilities that the Valley currently does not have.

Even smaller-scale renewable energy developments that would generate power for use locally are also dependent upon new transmission line development. This can be better understood by knowing some of the characteristics of electric power lines.

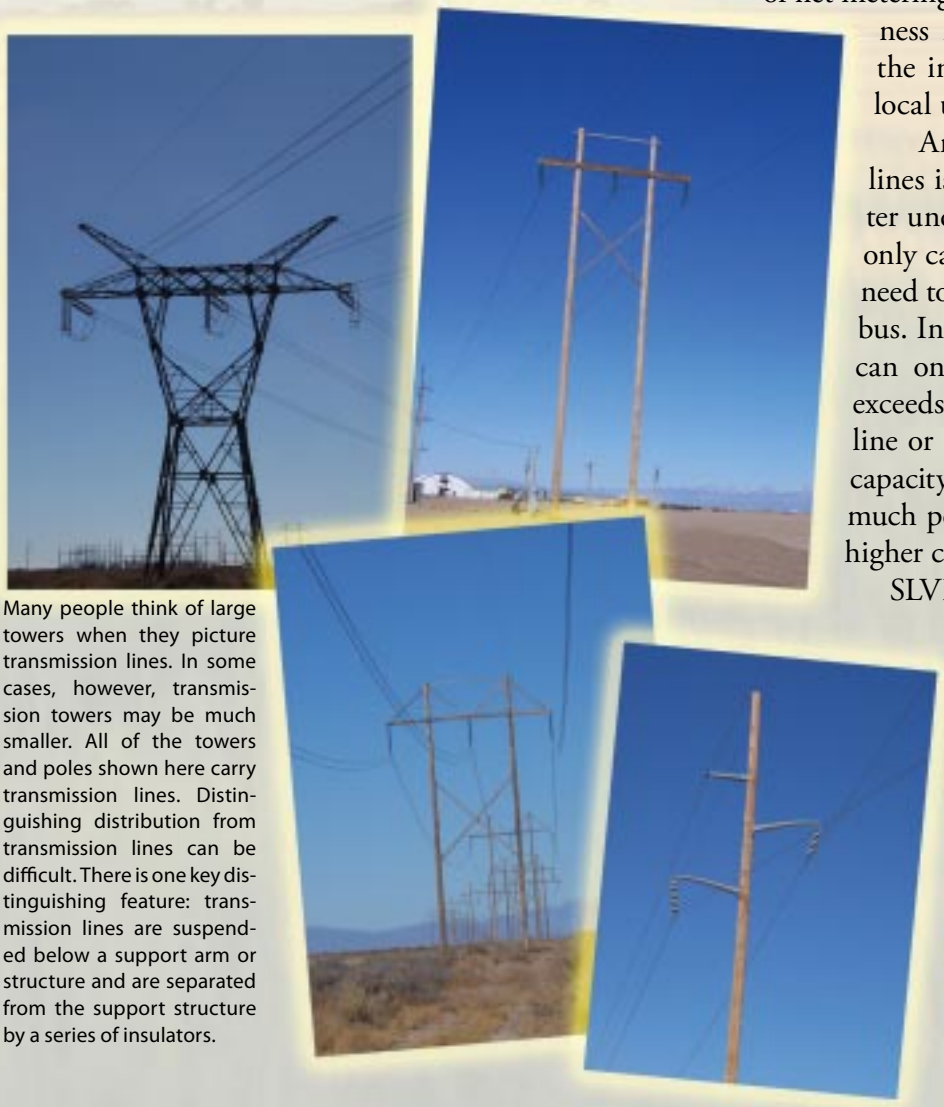
The Flow of Electricity

Power lines are uni-directional; electricity flows in only one direction at a time. Distribution networks are designed for electricity to flow from the main power supply to end users. Although power can flow in the other direction, safety equipment designed to protect linemen, technicians and consumers, as well as power control equipment designed to help maintain power quality, are typically installed with uni-directional power flow in mind.

This becomes an important consideration in the case of net metering. With net metering, an individual or business installs power generation equipment with the intent of selling excess power back to their local utility company.

Another important characteristic of power lines is that they have a limited capacity. To better understand, picture a school bus. The bus can only carry so many children; when more children need to ride than there are seats, you need another bus. In the case of power distribution, power lines can only carry so much power. When demand exceeds a line's capacity, you have to add another line or replace the line with one that has a higher capacity. Similarly, a substation can only handle so much power before it must be upgraded to handle higher capacity.

SLVREC has upgraded many lines from 15 kilovolts (kV) to 25 kV. Line upgrades are often accompanied by concurrent substation upgrades. Higher capacity lines offer members more reliable power delivery. Having more power in the line provides several benefits. As more and more power flows through lines, it creates heat. Then, as this heat dissipates into the surrounding air, some electricity is lost. Somewhat counter intuitively, lines with higher capacity—lines that can carry more power—loose less electricity and thus conserve energy.



Many people think of large towers when they picture transmission lines. In some cases, however, transmission towers may be much smaller. All of the towers and poles shown here carry transmission lines. Distinguishing distribution from transmission lines can be difficult. There is one key distinguishing feature: transmission lines are suspended below a support arm or structure and are separated from the support structure by a series of insulators.

Net Metering

Net metering systems allow power consumers to connect on-site generation sources to the utility grid. When the on-site generation source is producing energy, the consumer uses this energy instead of purchased power. When the on-site generation source is not producing energy, the consumer uses power purchased from the utility.

A utility company may either purchase power produced in excess of the consumer's needs or credit the consumer for power fed back into the electric grid. SLVREC's policy is based upon current state law. Copies of the policy are available from SLVREC customer service. In general, those who net meter must:

- Use as an energy source solar, wind, biomass or hydropower resources.
- Have the facility on premises owned, operated, leased or otherwise controlled by the Customer-Generator.

Members must pay an inspection fee prior to connection of their net metering service to ensure that their system meets all appropriate safety codes and does not adversely impact the cooperative's distribution network

Up to the point where the generation system produces power in excess of on-site needs, the cooperative will compensate the member by running the member's electric meter in reverse. However, if during a billing period, the net metering system produces more energy than the member uses, the excess energy will be purchased by the cooperative at the SLVREC's avoided cost. The avoided cost is defined as the average cost of wholesale power for the previous calendar year.

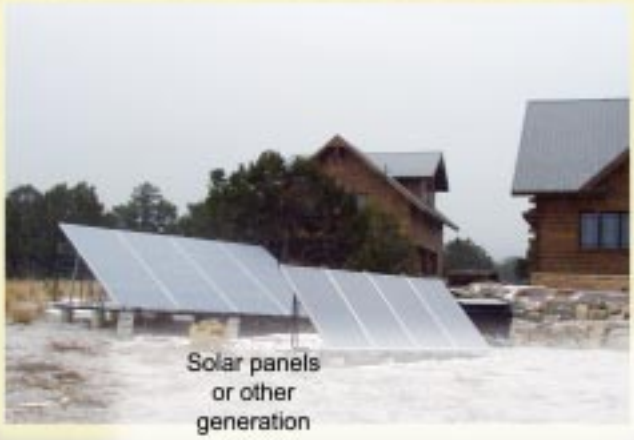
Members with net metering systems are still required to pay monthly minimum charges. These charges go toward system maintenance, meter reading and other overhead expenses associated with keeping the cooperative's distribution infrastructure available to members.

Members who are interested in installing a net metering system are encouraged to contact the cooperative first to discuss interconnection requirements and system needs. Net metering systems can be expensive. SLVREC can help determine an appropriately-sized system and provide information on installation concerns.

Net metering offers much promise. However, maintenance costs, current state law insurance requirement expenses and installation costs can make installing a net metering system prohibitive. SLVREC offers members an alternative way to use renewable energy through a green power program. This program offers members a way to ensure that the power they use comes from renewable sources

Under the cooperative's green power program, members pay a small premium for every 100 kWh block of renewable energy they purchase. SLVREC turns this money over to their power provider, Tri-State Generation & Transmission Association, who in turn uses it to purchase power produced by renewable generation sources. For every 100 kWh block purchased, 100 kWh of green power enters the electric grid. This program offers every member a cost-effective way to use renewable energy.

Customer service representatives can answer questions on the green power program, or help members contact SLVREC net metering specialists. Call for more information. The Governor's Energy Office may be also able to provide information on net metering in Colorado. (http://colorado.gov/energy)



The diagram to the left outlines the essentials of a net metering system. In most locations within the Valley, solar panels offer the most promise for consumer generation. With photo-voltaic generation systems, an inverter converts DC power to AC power. Power feeds into the member's electric service panel. A disconnect switch protects both the homeowner and utility workers. The meter records both member use and member generation.

What Your Electric Bill Includes

Over half of all of SLVREC's expenses are associated with power purchased from our energy supplier, Tri-State Generation & Transmission Association. As energy demands in Colorado have increased, Tri-State has been forced to build new power plants. That requires a long-term commitment of time and money. Add in increasing fuel costs and the result is higher wholesale power rates. SLVREC passes rate increases from Tri-State on to members. For the most part, recent rate increases at SLVREC have been associated with higher wholesale power rates.

SLVREC purchases power at wholesale rates and sells this power to members at retail rates. The difference between wholesale and retail prices covers the cooperative's overhead expenses. Overhead expenses include equipment, vehicles, employees, property taxes, fuel bills, insurance and other business expenses.

In addition to energy charges, SLVREC charges members a wires and maintenance fee. This fee covers all the expenses associated with power delivery: meter reading, substations, line maintenance and other system maintenance. The wires and maintenance fee is added to all accounts every month whether or not electricity was used. The money collected ensures that the cooperative's distribution system is up and running so that members have power when they need it.

As a cooperative, SLVREC is service-driven. The cooperative operates at actual cost. There is no profit motive. In fact, if the cooperative generates revenue, this money is returned to members in the form of capital credits. Capital credits are paid out based upon a member's usage in the year for which the excess revenue is being returned.

Year	Nominal electricity price (cents/kWh)	Real Price cents/kWh (normalized to 2005 dollars)
2005	9.42	9.42
2000	8.24	9.29
1995	8.40	10.28
1990	7.83	10.82
1985	7.39	11.95
1980	5.40	11.26
1975	3.50	10.38
1970	2.10	8.60
1965	2.25	11.26
1960	2.47	13.23
1955	2.65	15.94
1950	2.88	19.64
1945	3.41	30.78
1940	3.84	44.15
1935	5.01	59.09

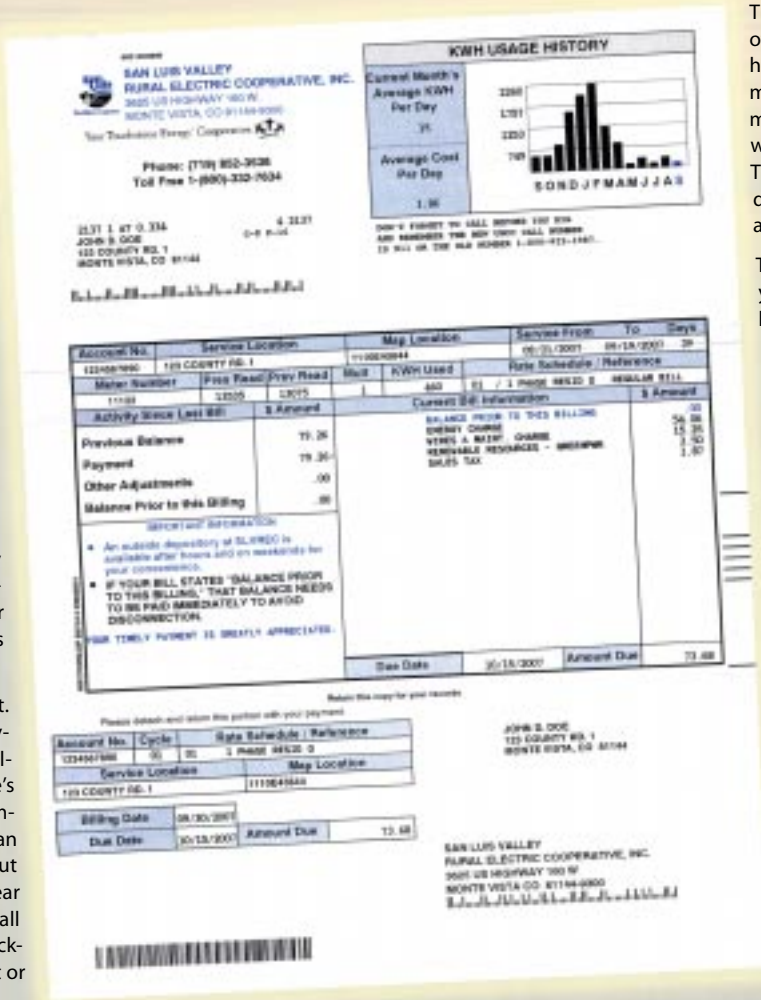
Source: EIA and "Bicentennial Edition: Historical Statistics of the United States, Colonial Times to 1970" - Census Statistical Abstracts

Understanding Your Electric Bill

Under the cooperative's budget billing program, members can elect to pay an average monthly charge. The average monthly charge is based upon prior year's usage and it helps to level out payments. Once a year, the amount paid is compared to actual charges. Either the member must pay a balance due or they receive a credit to their account. To be eligible for budget billing, a member must be on the line for the preceding 12 months at the same location.

Unless your bill states "Do Not Pay," you are required to send in a payment every month. Include the detachable bottom stub with your payment so your account is properly credited.

You may mail your payment. Or, you can drop it off at several locations within the Valley including the cooperative's office in Monte Vista. Customer service representatives can provide information about payment drop-off spots near you. If you prefer, you may call the cooperative with a check-by-phone payment or a debit or credit card number.



The kWh usage history graph shows your pattern of electric use over the past twelve months. The height of the vertical axis is determined by the month with the most power consumption. This can make the graph a bit misleading if you had a month with significantly more use than most of the others. The average cost per day and the average kWh per day show how much energy you used on the average in the current billing cycle.

The heading material shows information about your account, your meter number and the service location. It shows the service dates in the billing cycle and provides information about meter readings, kWh used and your rate schedule. The "Rate Schedule/Reference" box will indicate if your bill was estimated, if this is a final bill for your account, or if it is a minimum bill if you have less than the minimum energy usage.

Check the "Activity Since Last Bill" box to be sure your prior payments have posted properly. If a balance prior to this billing is listed, call SLVREC right away! If you do not pay your balance in full and you do not contact the cooperative, you risk disconnection. Disconnection fees can add up.

The box to the right of that, "Current Bill Information" shows the energy charge, wires and maintenance charge, and any other charges for the current billing cycle. Other adjustments will also appear here. For example, late fees, penalties, credits or other adjustments will show up here.

Special notices will show up in this area also. For example, if your account is automatically paid by a credit card or bank draft, it will include a "Do not pay" message.

Conservation: Saving Money

Conservation isn't a new idea for electric cooperatives. In 1937, when SLVREC was incorporated, miles of line needed to be built and substations were few and far between. Members didn't have the luxury of squandering this scarce resource. Besides, as a non-profit, SLVREC had no incentive to encourage members to use more electricity than they needed. Instead, the cooperative has worked with members to help keep their electric bills as low as possible.

Today, with concerns about greenhouse gasses, the high costs associated with building new generation facilities and a desire to reduce our dependence upon foreign oil, energy conservation has gained new momentum. Some utility experts have termed conservation the fifth generation source. Conservation could help forestall the need to build new power plants. In dollar terms, every dollar spent on conservation equals five dollars spent on generation.

SLVREC offers a number of conservation programs. Call customer service to learn how the cooperative can help you save on your electric bill! Follow the energy saving tips here to start saving today!

Refrigerators

Did you know that refrigerators consume about one sixth of all the electricity used in a typical home? If your refrigerator is older, replace it with an energy efficient model to save on your electric bill. According to Richard Karney, ENERGY STAR Program Manager, a refrigerator manufactured before 1993 uses twice as much energy as a new ENERGY STAR qualified model.

If you replace your refrigerator, avoid plugging the old one in as a backup. If you only need an extra refrigerator occasionally, unplug the second one when you aren't using it or consider using a compact mini-fridge instead of a full-size model. No matter what your refrigerator's age, follow these tips to trim its energy use:

- Position it away from a heat source such as the oven or direct sunlight from a window (or use a curtain to block direct sunlight if you can't reposition).
- Allow air to circulate around the condenser coils. Leave a space between the wall or cabinets and the refrigerator or freezer. Keep the coils clean.
- Make sure the door seals are airtight.
- Set the refrigerator temperature between 35 and 38 °F and the freezer at 0 °F.
- Minimize the amount of time the door is open.

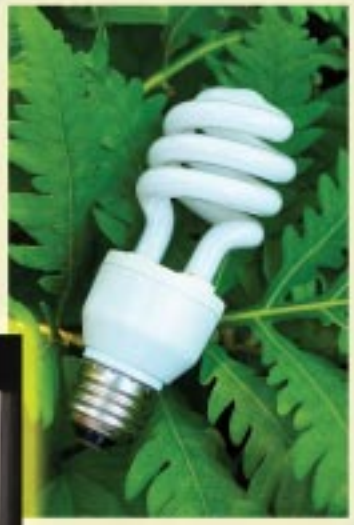
Lighting

According to the Rocky Mountain Institute (RMI), residential, commercial, industrial, and municipal lighting uses about 22 percent of all the electricity generated in the United States and accounts for 39 million tons of carbon dioxide emissions. RMI estimates that the technology already exists to save between 50 and 90 percent of the power now consumed by lights in the United States. That would save $30 billion a year—enough electricity to retire 70 to 120 large power plants—and reduce carbon-dioxide emissions by 20 to 35 million tons per year.

The most basic and most effective way to save money on lighting is the simplest. Turn lights off when you are not using them. Arrange work areas near windows so that you can use natural light whenever possible during the day. Use timers on lights that need to be on for specific times every day and make sure timers operate correctly.

You can increase your energy savings by replacing older incandescent bulbs with modern compact fluorescent lamps (CFLs). CFLs cost more than incandescent bulbs. Remember though, that replacing a 75-watt incandescent bulb with a 20-watt CFL that is in use for 5 hours a day will pay for itself in just over two years in terms of saved power costs. That light will then continue to work for upwards of 8 years, each year saving you more money. What a great return on your investment!

If every American home replaced the five highest-use light fixtures in their home with energy saving fixtures, or the incandescent bulbs in those fixtures with CFLs, each family would save more than $60 every year in energy costs, and collectively we would keep more than one trillion pounds of greenhouse gases out of our air, a reduction equal to the



emissions of 8 million cars.

Outdoor area lights provide welcome light for farms, homes and businesses But, outdoor lighting can be an unnecessary expense. Take stock of your outdoor lighting. Is it really needed? Recent studies also show that lights added for outdoor safety can sometimes create greater safety hazards than they solve. If a building or other object creates a dark spot within the travel area, the dramatic change in lighting creates a greater safety hazard than if no lights were installed at all.

If you have area lights for increased security, consider the recommendation of crime prevention experts at Rutgers University (http://crimeprevention.rutgers.edu). They say that dark areas are better protected than well lit areas if there is no one around to witness and report crimes and if lighting helps criminals to see what they are doing. In these situations, installing motion detectors on area lights provides a more effective security solution.

Motion detectors and switches can also reduce outdoor energy costs for other applications as well. Lights with on/off switches and lights with motion detectors attached to a fluorescent light source cost pennies a year to operate. Removing one yard light, or putting a light on a switch can save SLVREC members between $60 and a few hundred dollars per year.

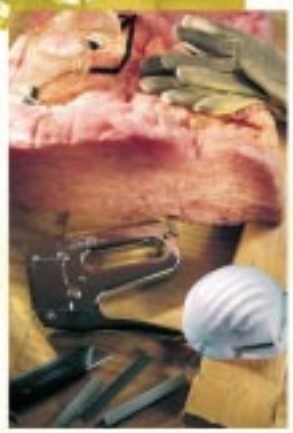
Water Heaters

Your water heater accounts for a significant portion of your home's energy bill. Anything you can do to help conserve hot water will reduce your energy use.

When you turn on a hot-water faucet during cold weather, it may take several seconds for the water to become hot, especially if it's a long distance between the faucet and the water heater. Shorten this time by insulating your hot water pipes where they are accessible. Insulation is particularly effective if the pipes run through unheated portions of your home like a crawl space or attic.

Check your water heater too. If it is warm to the touch, it may benefit from additional outside insulation. Water heater blankets are available at most hardware stores.

Building a new home? Use a passive solar design and energy-saving building strategies to keep your average monthly energy bill low.



If you have a dripping faucet, especially if it's a hot water drip, it's worth the time it takes to fix it. If you use well water, your well pump probably runs on electricity. Even a slow drip wastes as much as 15 gallons of water per day. A ⅛-inch stream of water can send 400 gallons per day down the drain!

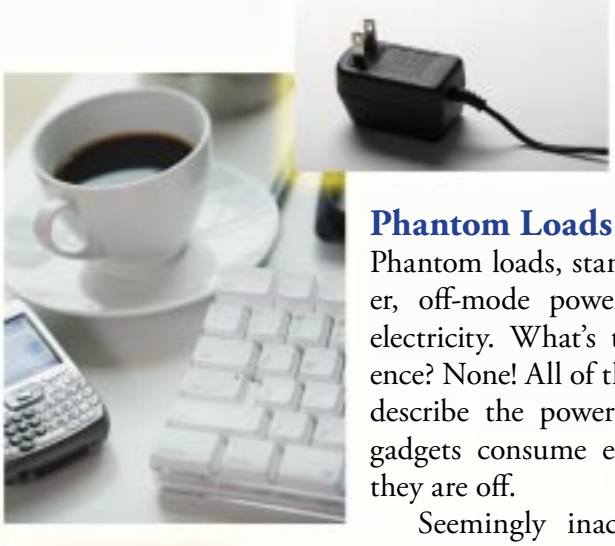
Replacing a standard showerhead with a low-flow showerhead can save about 7 gallons per person per day. If you keep your shower to seven minutes using a low-flow showerhead, you'll use about 14 gallons of water or less. Baths usually require about 20 gallons of water, the same as a ten-minute shower.

Washing dishes by hand several times a day costs more than operating an energy-efficient automatic dishwasher. Wash only full loads. Choose the shortest washing cycle you can to get the job done.

Do you pre-rinse dishes before you wash them? Many newer dishwashers do a great job of cleaning without a pre-rinse. If your dishwasher is an older model that needs a little assistance, fill the sink with a small amount of water for the prewash instead of letting the tap run over each item. Use cold water instead of hot for this chore to save more energy.

The biggest cost of operating a dishwasher comes from the energy required to heat the water before it even reaches the machine. If you have a newer model dishwasher with a booster heater, use it and turn down the thermostat on your household water heater to 120 °F.

Like dishwashers, much of the cost—up to 90 percent—of operating washing machines is associated with the energy needed to heat the water. Unlike dishwashers, washing machines do not require a minimum temperature for optimum cleaning. Either cold or warm water can be used for washing most laundry loads; cold water is always sufficient for rinsing. Make sure you follow the cold-water washing instructions for your particular laundry detergent. Washing only full loads is another good rule of thumb for reducing hot-water consumption in clothes washers.



Phantom Loads

Phantom loads, standby power, off-mode power, leaking electricity. What's the difference? None! All of these terms describe the power electrical gadgets consume even when they are off.

Seemingly inactive electrical items can use a substantial amount of power. The average home in the U.S. has between 10 and 25 phantom loads, and this number is growing quickly. Phantom loads can consume between 5 and 10 percent of a home's total electric use. Phantom loads are created by devices that:

- Receive power through a stand-alone power supply or charger.
- Have a remote control.
- Have a soft-touch keypad.
- Charge the battery of a portable device.
- Have a clock, internal timer, or display that remains on when the item is off.
- Are warm near the switch when switched off.
- Do not have an "off" switch.

Standby power is probably responsible for 1 percent of the world's carbon dioxide emissions. This may seem like a small amount until you consider that this is power consumed by appliances that are switched off or are not performing their principal functions.

It can be easy to eliminate some of the standby power use in your home. Simply unplug chargers and power supplies when you are not using them. Cell phones chargers are a common phantom load culprit. According to Future Forests, only 5 percent of the power drawn by cell phone chargers is actually used to charge phones. The other 95 percent is wasted when chargers are plugged into the wall, but not into a phone. Alternatively, plug items into a power strip and use the switch on the strip to turn off all the attached devices at once. This works well for stereo systems and home theater equipment.

When it comes time to replace units you can't unplug—like telephones, answering machines and garage door openers—consider standby power consumption in your purchase decision. There can be a huge difference. For example, the standby power consumption of a compact audio system can vary from 1.3 watts to 28.6 watts. Certain appliances consume nearly as much power while switched off as switched on. Most television cable boxes show little change in power between the two modes and many models of compact audio equipment and VCRs have similar "on" and "off" power requirements.

Know What You Use

Calculate the electric use of any household appliance using this formula:

Watts/1000 x hours = KwH x rate = Cost

Appliance	Average Wattage	Average Hours per Month	Approximate kWh per Month	Average Cost (at $.10 per kWh)
Blender	200	3	0.60	$0.06
Coffee Maker	1,200	12	14.4	$1.44
Dishwasher	1,200	25	30.0	$3.00
Oven	2,660	15	39.9	$3.99
Electric Range	12,500	15	187.5	$18.75
Refrigerator/ Freezer (ENERGY STAR)	800	117	93.6	$9.36
Refrigerator/ Freezer (pre 1992)	600	215	129.0	$12.90
Portable Space Heater	1,500	150	225.0	$22.50
Ceiling Fan	80	150	12.0	$1.20
Clothes Dryer	4,600	20	92.0	$9.20
Washing Machine	512	17	8.7	$0.87
Water Heater	4,500	75	337.5	$33.75
Hot Tub Heater (no cover on tub)	5,000	183	915	$91.50
Hot Tub Pump	1,000	183	183.0	$18.30
Computer	80	20	1.6	$0.16
Computer Monitor	80	20	1.6	$0.16
Computer & Monitor left on 24/7	160	720	115.2	$11.52
Television 40-inch LCD	(on) 250 (on standby) 100	120 600	30.0 60.0	$9.00
Television 42-inch Plasma	(on) 450 (on standby) 225	120 600	54.0 135.0	$18.90
Television (unplugged or plugged into surge strip that is switched off when TV not in use)	250	120	30.0	$3.00
Incandescent bulb (100 watt)	100	150	15.0	$1.50
Compact Fluorescent Lamp (100 watt equivalent)	27	150	4.1	$0.41
Outdoor Area Light	150	180	27.0	$2.70

Politics and Power: How can you participate?

Politics has always played a part in our industry. From the cooperative's board room to the halls of Congress, politics plays a key role in energy policies.

Cooperatives owe their very existence to politics. The federal government helped establish cooperatives as a way to bring electricity to rural America in the late 1930s. Since then, the years when utility issues have *not* been debated on the floors of our state and federal capitals have been few and far between.

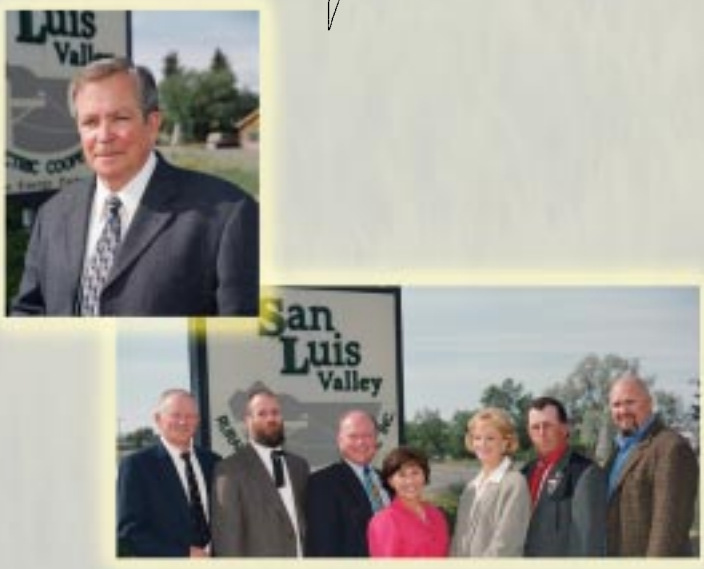
Colorado Rural Electric Association (CREA) and National Rural Electric Cooperative Association (NRECA) are our political action groups. These organizations have representatives who lobby at the state and federal level, respectively. But, when it comes to cooperatives, it's grass roots power that has shaped our organization.

Your voice really does make a difference. I encourage you to make your concerns known to me, your directors at SLVREC, your state legislators and your federal congressmen. Our goal, through this publication and our other communication to our members, is to help you keep informed about issues affecting our industry. We believe that informed members can make the most difference.

I encourage you to visit the CREA and NRECA web sites to learn about issues facing our industry. Call your congressman. Speak to your state representatives. NRECA has established a web site to make it easy for you to initiate a dialogue with your elected officials. Just visit www.ourenergy.coop to take action.

At the local level, I encourage you to become an active participant in your cooperative. Make your concerns well-known to the cooperative's board of directors and to me. I hope to see you at the cooperative's annual meeting, which is held the second Tuesday in June every year.

John R. Villyard



NRECA **http://www.nreca.org/**
National Rural Electric Association site. Here you can find information on a variety of topics affecting cooperatives around the nation.

Our Energy; Our Future **http://www.ourenergy.coop**
A national grassroots campaign to help you as a consumer/member engage in a conversation with your elected officials about how to meet climate change goals while keeping electricity reliable and affordable.

U.S. Senate **http://www.senate.gov/**
Home page for the U.S. Senate with links to Senator home pages, pending bills, and much more.

U.S. House of Representatives **http://www.house.gov/**
Home page for the U.S. House of Representatives.

Thomas **http://thomas.loc.gov/**
In the spirit of Thomas Jefferson, legislative information from the Library of Congress.

CREA **http://www.crea.coop/**
Colorado Rural Electric Association site.

Colorado General Assembly **http://www.leg.state.co.us/**
The home page for Colorado's House and Senate.

Governor's Energy Office **http://www.colorado.gov/energy/**
A state office charged with the mission of advancing energy efficiency and renewable, clean energy resources.

Public Utilities Commission **http://www.dora.state.co.us/PUC/**
Information about public utilities in Colorado.

Tri-State Generation & Transmission **http://www.tristategt.org/**
SLVREC's power provider's home page.

San Luis Valley Electric System Improvement Project **http://www.tristategt.org/transmission/sanluisvalley**
Information on a proposed new project that would involve the construction of a 230-kV transmission line between the Walsenburg Substation and the San Luis Valley Substation

Touchstone Energy **http://www.touchstoneenergy.com**
National alliance of electric cooperatives.

Energy Star **http://www.energystar.gov/**
Excellent conservation resource.


SAN LUIS VALLEY
RURAL ELECTRIC CO-OP
A Touchstone Energy® Cooperative