MOU/CO-OP Energy Efficiency Programs Reporting Form

For: Electric Cooperatives that had retail sales of more than 500,000 megawatt hours in 2005, and Municipally-Owned Utilities

Form# 50-814

Energy Systems Laboratory

SECO State Energy Conservation Office

This form is intended to partially fulfill the reporting requirement. Please provide all the information requested below.

Purpose of this document: *As mandated by the 82nd Legislature (2011), beginning April 1, 2012, all electric cooperatives that had retail sales of more than 500,000 megawatt hours in 2005 and all municipally owned utilities must report each year to the State Energy Conservation Office (SECO), on a standardized form developed by SECO, information regarding the combined effects of the energy efficiency activities of the electric cooperative/utility from the previous calendar year, including the annual goals, programs enacted to achieve those goals, and any achieved energy demand or savings goals. [Sections 39.9051 and Section 39.9052 of the Utilities Code].*

Data for a consecutive 12-month period. *Beginning:* January 1, 2014 *Ending:* December 31, 2014

Lyntegar Electric Cooperative, Inc.
MOU/Co-op

Greg Henley, CEO
Contact Person (Name & Title)

PO Box 970 Tahoka, TX 79373
Address

806-561-4588
Phone

greg@lyntegar.coop
Email

Please attach a copy of the detailed report containing the below information.

Energy Efficiency Program	Estimated Electric Peak Demand Savings (kW)	Estimated Electricity Use Savings (kWh)	Estimated Natural Gas Increase From Fuel Switching – If Applicable *Specify Units:* ☐CCF ☐MCF ☐Therms	Other Program Performance Metric
See attached				
Totals:	218	1,913,523		

Email completed forms to SECO at SB924.Reporting@cpa.state.tx.us

For more information on Senate Bill 924 Requirements visit: http://seco.cpa.state.tx.us/energy-reporting/utilities.php

LYNTEGAR ELECTRIC COOPERATIVE, INC.
TAHOKA, TEXAS

ENERGY CONSERVATION PROGRAM & WORK PLAN
March 2015

I. PURPOSE

The purpose of the Energy Conservation Program is to specify those plans, actions and procedures necessary to accomplish the objectives of the policy of this corporation regarding energy conservation.

II. POLICY

The Board of Directors of Lyntegar Electric Cooperative, Inc. has adopted the following policy:

The cooperative will make all efforts to assure the conservation of energy at all of its own facilities and in all activities of the cooperative. The cooperative will, through various methods available, educate and guide its consumers toward the conservation of energy.

The cooperative will engage in training its employees, to assure they are aware of the need for and the best methods available to conserve energy.

The cooperative will make efforts to coordinate its activities concerning energy conservation with those of other such power suppliers, statewide associations, governmental bodies, building industry other organizations that are concerned with the conservation of energy.

The cooperative will develop and maintain programs and activities designed to promote energy conservation and to monitor such programs and activities so as to measure their results.

The cooperative will consider the energy conservation program of the cooperative in future contemplated rate changes.

The cooperative will allocate resources to be used toward its commitment to energy conservation.

III. RESPONSIBILITY

The member services department has been designated to carry out the Energy Conservation Program of the cooperative. This department contains the manager of member services, and the member services advisor. It will be the responsibility of this department to develop plans, to represent the cooperative in all areas of energy conservation, guide consumers and employees toward better methods of energy conservation, to monitor results of this program, and to report those results to the management. The cooperative plans to have the equivalent of two full-time employees working in energy conservation. Cooperative employees spent approximately 3,713 hours working in energy conservation in 2014. A list of the employees involved in energy conservation and an estimated percentage of time each devotes toward energy conservation is a follows:

NAME	TITLE	% OF TIME
Paula Reynolds	Clerk	16
Barry Pittman	Manager Member Services	41
Laveta Bloodworth	Service Branch Clerk	13
Frank Collins	Branch Manager	11
Don Collins	Crew Foreman	1
Julie Stacha	Service Branch Clerk	2
Lea Swinford	Billing Supervisor	20
Richard Moore	Member Services Advisor	37
Byron May	Member Services Advisor	36
Robert Turner	Branch Manager	1

IV. METHODS OF INFORMING CONSUMERS OF THE ENERGY CONSERVATION PROGRAM OF THE COOPERATIVE, ASSISTANCE AVAILABLE, AND RESOURCES USED TO ACCOMPLISH THIS PROGRAM

A. Bill Stuffers

Bill stutters are mailed periodically that advise consumers that the cooperative personnel are available to aid them in the most modern methods of energy conservation.

B. Newspapers

1. The Texas Coop Power newspaper, published by the Texas Electric Cooperative Association, is mailed to each consumer monthly. Two special pages of this publication are designed by personnel of the cooperative and serve as an ideal instrument to advise consumers of the availability of cooperative personnel to aid them in methods of energy conservation. A major portion of-this publication is devoted to energy conservation.

2. Local newspapers may be used to notify the public of the availability of cooperative personnel to assist them in energy conservation techniques.

c. Book Covers

1. Book covers are periodically supplied to area schools stressing energy conservation, and explaining the availability of cooperative personnel to assist consumers with regard to energy conservation.

D. Exhibits & Displays

1. Display booths at county fairs are set up containing energy conservation information, with cooperative personnel manning these booths to explain the availability of cooperative personnel to assist them in energy conservation.

2. Energy Saver Water Heaters are sold and serviced by the cooperative. If members inquire about these heaters, they are given all the information as to how they perform, stressing the conserving of energy and savings on their energy bill.

V. METHODS OF IMPLEMENTATION

A. To Consumers

1. Personnel Contacts

Cooperative personnel visit with consumers and explain the policies and procedures of the cooperative, in addition to informing them of the importance of energy conservation and assistance available to aid them in their plans for energy conservation.

2. Personnel Services

a. Cooperative personnel conduct energy evaluations for consumers of the cooperative, showing the saving available through energy conservation and the amount of energy that is presently being wasted. There were no walk thru energy evaluations and three (3) energy conservation information visits performed by the cooperative personnel during the past year.

b. Cooperative personnel advise consumers concerning remodeling techniques that conserve energy.

(1) Proper insulation
(2) Proper heating units
(3) Proper cooling units
(4) Proper design in construction for energy efficient structures

c. Cooperative personnel advise consumers building new residences concerning techniques that conserve energy.

(1) Proper insulation
(2) Proper heating units
(3) Proper cooling units
(4) Proper design in construction for energy efficient structures.

d. Cooperative personnel make visits to the homes of consumers giving information on the proper use and care of appliances and energy saving techniques.

e. Cooperative personnel make visits, and take advantage of any situation to give information regarding energy conservation to consumers for all types of load. Cooperative personnel visited approximately 290 members during the year.

(1) Residences
(2) Irrigation
(3) Farm related
(4) Oil related
(5) Schools and Churches

3. Programs given to various groups by personnel of the cooperative designed to educate public in regards to energy conservation. There were 4 programs given to approximately 732 people. Such programs were given to:

a. Civic Organizations
b. Schools
c. Clubs
d. Employees

B. Cooperation with Builders and Contractors

Staff members work with and give advice to all builders and contractors in the cooperative's service area.

VI. RECORDS

A. Types of Loads for Which Records are Kept

1. Residential

   A record is kept of the electrical requirements in a residence being remodeled, or in a new residence. These records give the estimated annual KWH usages as well as the estimated annual diversified KW demand.

2. Irrigation

   A record is kept of all new irrigation motors installed by showing horsepower size, annual KWH usage and estimated annual diversified KW demand.

3. Farm Related

   Records are kept on all major farm equipment that uses electricity for a source of energy showing annual KWH usage and estimated annual diversified KW demand.

4. Obtaining records from consumers give employees an excellent opportunity to explain the energy conservation program of the cooperative.

5. These records will enable the cooperative to study power requirements of different type loads.

6. Oil Related
   Cooperative personnel assist oil companies monitoring consumption in relation to pumping time in order to maximize the efficiency of the pumping unit.

VII. ENERGY CONSERVATION REGARDING THE COOPERATIVE'S OWN FACILITIES

A. Buildings

1. All thermostats are to be maintained at energy saving levels.

2. Lights in buildings or offices not being used will be turned off.

3. Thermostats will be regulated in vacant offices, warehouses, and meeting rooms to use a minimum amount of energy.

4. Patrols will be made each afternoon to make sure all. lights have been turned off for the night.

5. Use is made of double entrances at office building to minimize the loss of heating or cooling.

6. All new buildings of the cooperative will be built with energy conservation in mind.

B. Outside Lighting

1. Outside lighting is operated by electric eye switches to make sure energy is not wasted by lights burning during daylight hours.

2. Only enough outside lights are used as to insure safety and security.

C. Appliances

All appliances purchased by the cooperative are selected with energy conservation in mind.

D. Vehicles

1. All employees are instructed to control speed in order to conserve energy. The cooperative maintains its own vehicle shop and makes sure all vehicles are performing with peak efficiency.

E. Cost Savings

It is very difficult to establish the actual savings to the cooperative in regard to good energy conservation practices because of the wide variety of weather conditions that we experience in this geographical location and load added at each facility. However, we do believe that approximately 21,047 kWh were saved because of energy conservation practices resulting in an approximate $1,876.74 savings in 2014.

VIII. TRAINING PERSONNEL

A. The cooperative takes every opportunity available to send employees responsible for the Energy Conservation Program of the cooperative to schools, workshops and meetings that will aid them in becoming more knowledgeable in all types, methods, and techniques of energy conservation.

B. The cooperative will engage in training its employees to better understand the methods available to conserve energy in its own facilities as well as being able to assist the consumers in the conservation of energy.

IX. BENEFITS TO THE CONSUMER

Exact savings to residential consumers are difficult to determine due to wide variety of weather conditions that are experienced in our geographical location and new load connected to our system throughout the year. However, due to the ongoing energy conservation practices emphasized to the cooperative's members, we believe that an approximate 3 percent savings in energy usage occurred in 2014. This results in a savings of $208,028.88 based on approximately 1,892,476 kWh.

X. OPERATING COST AND EXPENDITURES

A. 2014 Expenditures

1.	Personnel (Payroll)		$ 210,218.35
2.	Transportation		3,610.97
3.	Conservation Incentive Programs		4,425.00
4.	Signs and ads in publications		4,383.80
5.	Meeting & Travel		0.00
6.	Misc.		1,221.19
		TOTAL	$ 223,859.25

B. 2015 Budget

1.	Personnel (Payroll)		$ 230,300.00
2.	Transportation		3,956.00
3.	Conservation Incentive Programs		4,848.00
4.	Signs and ads in publications		4,803.00
5.	Meeting & Travel		0.00
6.	Misc.		1,337.00
		TOTAL	$ 245,244.00

XI. MAJOR CONCERNS OF INEFFICIENT USE OF ENERGY

Irrigation is a major part of the load on our system. The cooperative completes a formal Power Requirement Study which includes our irrigation usage on the entire system outlining average efficiencies of the pumping plants today and the improvements that we hope to achieve by improving the efficiency of the pumping plants in the future.

XII. ELECTRIC HEATING INCENTIVE PROGRAM

A cash incentive payment is paid to consumers when building a new home or remodeling existing homes and installing an energy efficient "all electric" or "Dual-Fuel heat pump" home heating system. "Energy Efficient Home" guidelines must be met to maximize the incentive payment.

SUMMARY
OF
ENERGY CONSERVATION WORK PLAN AND BUDGET

Borrower Texas 60 Lynn

No. of Consumers _____

			Present	Proposed
1.	Conservation in Borrower's Facilities			
	A.	Amt. of Capital Expen.: Last Yr. $ -0-		
		This Yr. $ -0-		
	B.	Amt. of Annual Savings: Last Yr. $ 1,826.17		
		This Yr. $ 1,876.74		
	C.	Solar Applications		
	D.	Lightning	X	X
	E.	Thermostat Control	X	X
	F.	Weatherization of Facilities		
	G.	Vehicles	X	X
	H.	Heating/Cooling System Modifications		
	I.	Employee Education	X	X
	J.	other		
2.	Consumer Education			
	A.	Local Newspapers	X	X
	B.	TV		
	C.	Radio	X	X
	D.	Meetings with Consumers	X	X
	E.	Display/Demonstration/Films	X	X
	F.	Bill Stuffers/Newsletters	X	X
	G.	Other:		
3.	Technical Services			
	A.	Energy Audits (No.): Last. Yr. 0 This Yr. 0		
	B.	Assist in Arranging to have Suggested Measures Installed	X	X
	C.	Assist in Arranging Financing		
	D.	Advise on Appliance and Equipment Efficiency and Suggested Usage Patterns	X	X
	E.	Assess Usefulness of Solar Applications	X	X
	F.	Other:		

			Present	Proposed
4.	Participation with Other Organizations			
	A.	Building Contractors		
	B.	Weatherization Contractors		
	C.	State Energy Offices		
	D.	Statewide/NRECA		
	E.	G&T		
	F.	Local and/or State Extension Service		
	G.	Other: _____		
		_____		

				Previous Year	Proposed Year
5.	Resources Dedicated				
	A.	Dollars			
		(1)	Personnel	$ 209,530.96	229,547.00
		(2)	Information	4,383.80	4,803.00
		(3)	Capital Expenditures	0.00	0.00
		(4)	Supervision	687.39	753.00
		(5)	In Cooperation With Others	4,425.00	4,848.00
		(6)	Other: transportation:	3,610.97	3,956.00
			_____		
			Total	$ 222,638.12	243,907.00

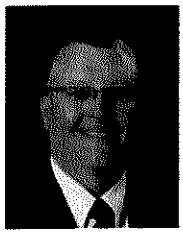
B. Staff Time

(1) No. Employee Hours 3,713

(2) Names of full and part-time energy conservation staff:

(See page 1of Energy Conservation Program & Work Plan)

The Life of a Lineman



MESSAGE FROM CEO GREG HENLEY

They wake before the sun, pour steaming cups of coffee and kiss their families goodbye. After swinging by the office to get the day's orders, they climb into their trucks and head out. Lineworkers form a solid team with one job: Deliver safe, reliable electricity. But that job can change in a million ways when rough weather sets in.

We often take power—and the men and women who provide it—for granted. Let's take a moment and stand in their boots.

Linemen have to work safely and efficiently—all while 40 feet in the air wearing sturdy, thick rubber gloves that protect their lives but make performing many tasks more difficult. On a typical day, lineworkers maintain electrical distribution lines or build service to new homes and businesses. They have a lot on their plates. But when our dispatch center calls with a problem, everything else takes a backseat.

Power restoration takes precedence over a lineworker's daily to-do list. We have crews standing by to serve you 24 hours a day, every day of the week, including weekends and holidays.

Can you imagine getting a call at 3 a.m. telling you that you must go work outside during bad weather? Not many people are even willing to face storms, but our lineworkers face the harsh elements every day, all to serve you.

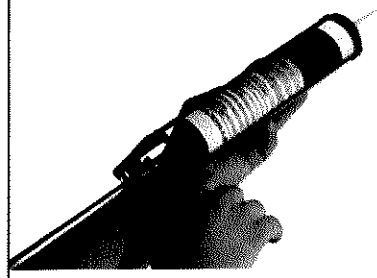
(C) PHOTODISC

Lineworkers also focus on safety. The lives of co-workers are on the line. Job safety is important to everyone, no matter the occupation. But for lineworkers, there can be no slipups or careless actions. Mistakes can cost someone a limb or their life. That's one of the reasons linemen form a brotherhood. When linemen put their lives in the hands of co-workers every day, they become more than colleagues—they're family.

That sense of family extends to electric co-ops across the nation. One of our principles is Cooperation Among Cooperatives. We help other co-ops in their time of need, and they extend that service to us, too. It's reassuring to know that if a severe storm strikes, a national team of lineworkers stands ready to answer the call.

To be ready to respond no matter the situation or weather conditions, linemen are highly trained. At Lyntegar Electric, lineworkers go through regular training to ensure that they can work safely with various kinds of equipment. The equipment itself is tested regularly, too.

These highly skilled workers help to provide the power we need to light our homes and businesses every day. They endure harsh weather and long hours, all to make our lives better. Please take a moment to thank them.



Seal Air Leaks; Save Energy

Heating and cooling your home costs money, yet most homes let some of that conditioned air escape to the outdoors through tiny leaks, like cracks around windows; doors that don't close quite tightly enough; and holes in walls that allow cable, telephone, sump pump and electrical lines to enter the building.

Those same holes and cracks allow hot air to seep into your air-conditioned home from the outside during the summer and cold air to sneak in during the winter.

No matter if conditioned air is getting outside or fresh air is coming in, the result is the same: Your air-conditioning or heating system has to do extra work to keep the indoor air at the temperature you like.

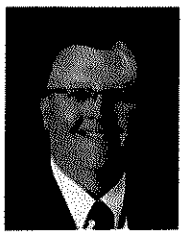
Remove old, cracked caulking and replace with new caulking designed for the application. Caulking can be designated for exterior, interior and bathroom applications, and you don't want to use bathroom caulk on the outside of your home. Also, make sure the caulk can be painted if you want it to blend in with colors used in the rest of your home.

So find those leaks and seal them. Here are some tips:

▶ On a windy day, light a stick of incense or a match indoors, blow it out and hold it near the interior of each window, door, electrical box, plumbing fixture, electrical outlet, ceiling fixture, attic hatch and anywhere else where you see an opening that lets something from the outside in. If the smoke moves, you have found an air leak.

▶ Plug the leaks. You can do that by applying caulk right into the hole or crack. You also can install weatherstripping around doors and windows.

Play It Safe with Power Lines



MESSAGE FROM CEO GREG HENLEY

I read a pretty amazing story the other day. It involved two teens in Indiana, Lee Whittaker and Ashley Taylor, who were driving down the road with some friends when their car started to fishtail. Lee did his best to keep the vehicle on the road. But before he knew it, he was sliding straight into a utility pole—and that pole came down, lines and all, right on top of his overturned car.

Now, most folks faced with this situation would do what comes naturally: Get out of the car. But Lee and Ashley knew better. Not a week earlier, they had attended a safety demonstration at their school sponsored by their local electric co-op. One of the key messages relayed was "stay in your car if it ever hits a power pole, where you'll be safe from any electrical current."

The two did just that and kept their friends in the car and family members at a safe distance once they arrived. As a result, the entire group walked away with just a few minor injuries. However, without basic knowledge of electrical safety, the outcome that night could have been much different.

The electricity Lyntegar Electric Cooperative provides day-in and day-out is a phenomenal resource, powering our modern lifestyles in a safe, reliable and affordable way. But electricity must be respected. If safety isn't made a priority, what changes our lives for the better could change them for the worse in an instant.

If your vehicle comes in contact with a power line, would you know what to do?

Lee and Ashley know this from experience, and we're striving to keep you informed of electrical safety so you don't have to learn a similar lesson the hard way.

Safety is a fundamental part of the culture at Lyntegar Electric Cooperative. Being an electric lineworker is ranked by the U.S. Department of Labor as one of the country's top 10 most dangerous jobs, on the same list as fishermen, loggers and military servicemen. We demand that not only those out in the field, but also employees at all levels make safety a top priority.

As part of our safety commitment, please take time to learn how you can be safe around electricity at home. Spending just a few minutes with some helpful resources can make all the difference when you're faced with a possible unsafe situation. For more information on electrical safety, please visit our website, at lyntegar.coop, as well as SafeElectricity.org and esfi.org.

I hope there won't be any stories about Lyntegar Electric Cooperative members getting into sticky situations like Lee and Ashley did. But if there are, a few minutes spent studying safety today could ensure a happy ending.

Energy Star appliances are exempt from sales taxes on Memorial Day weekend.

Tax Holiday

If you've had your eye on an energy-efficient appliance, Memorial Day weekend might be the time to buy. That weekend, shoppers in Texas will not pay sales tax on certain Energy Star-rated appliances.

The tax holiday, created by the Legislature in 2007, runs from May 24-26 this year.

Items exempt from taxes that weekend include any of these products that are Energy Star-rated:

- Air conditioners priced at $6,000 or less
- Ceiling fans
- Clothes washers
- Dehumidifiers
- Dishwashers
- Incandescent and fluorescent lightbulbs
- Programmable thermostats
- Refrigerators priced at $2,000 or less

Clothes dryers are not rated by Energy Star and are not included. Water heaters are also excluded, even those rated by Energy Star.

The holiday covers Internet, catalog and layaway sales of qualifying products as well. In addition to the purchase price, the tax holiday extends to shipping, delivery and installation charges if the purchased item becomes a permanent part of a home, such as a ceiling fan or a plumbed-in dishwasher.

COURTESY THE HOME DEPOT

Energy-Saving Heating and Cooling Systems

Climate, costs and technology matter when looking at home comfort equipment

BY THOMAS KIRK

Did you know that more than half of what you're spending on energy bills goes to heating and cooling your home? It all adds up when you think about the amount of energy and money it takes to heat a home in the winter and cool one in summer. However, consumers can turn this necessary expense into savings by selecting the appropriate heating, ventilation and air-conditioning system—commonly known as HVAC—for their needs. Modern systems featuring ductless, air-source or ground-source technologies are just as effective as more traditional systems, but are much more energy efficient.

Consider Going Ductless

If you are conditioning smaller areas in retrofits, home additions or in new construction, a ductless heat pump, referred to as a DHP, may be right for you. The DHP uses an estimated 50 to 60 percent less energy than electric resistance heating systems and may exceed the efficiency of ducted heat-pump systems by more than 25 percent. They're made up of an outside compressor, indoor air-handling units (mounted on a wall or ceiling), refrigerant lines and a controller (either an in-home display or wireless remote). A 1¼-ton DHP system—an average size for heating and cooling a single-zone home—could cost about $4,000 to install.

Keep in mind that pricing varies based on brand and installation needs. But despite the system's benefits, some consumers may not like having their heating system and equipment located on their walls and visible. When DHPs are installed, they are placed at the top of walls, near the ceiling.

Is Air Source the Right Choice?

Ducted electric air-source heat pumps, or ASHPs, provide year-round space conditioning and can both heat and cool a home. They use a single piece of equipment—allowing for a lower capital cost in most cases—and provide heat less expensively than electric resistance heating.

These systems work by transferring energy between the air outside and either the air or water inside a building. This principle of moving energy, not creating heat, is what allows ASHPs to be more efficient than electric resistance heating.

When choosing an ASHP, consider your local climate and heating needs. Most air-source heat pumps are best suited to relatively warm climates. When temperatures are low in such regions, a heat pump's efficiency falls dramatically.

Choosing the right system size is also important. If a heat pump is too small, it can't provide sufficient cooling, but an oversized one can be costly and require ductwork and other equipment to operate, which are added expenses. Newer systems are proving effective in northern regions, especially when combined with a backup fuel source such as natural gas.

Ground Source

Ground-source heat pumps, or GSHPs, also called geothermal heat pumps or geoexchange systems, are electrically powered devices that use consistent year-round temperatures found underground to regulate indoor air temperature.

GSHP systems are composed of one or more underground loops that act as heat exchangers. They are connected to a heat pump unit that is then connected to a home's heating and air conditioning system. In the summer, the loops transfer heat from the home into the ground or, in some cases, water. In the winter, the process is reversed. Because GSHPs take advantage of moderate temperatures found below the ground for heating and cooling, they are much more efficient than air-source heat pumps and other standard HVAC equipment in most climates.

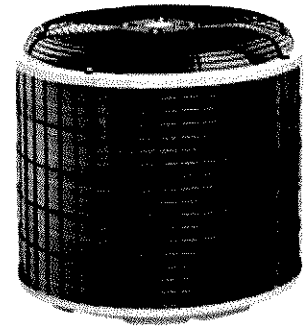
While savings vary depending on climate, the U.S. Department of Energy estimates that most homeowners will see a return on their investment in a GSHP system in two to 10 years through lower energy bills. A desuperheater or hot water generator can be added to the GSHP system, eliminating the need to heat water with gas or more electricity. If the investment is financed on a mortgage, cost savings begin immediately.

As you consider these many heating and cooling options for your home, think carefully about whether a high-efficiency system will save you money in the long run and whether it meets your heating and cooling needs. Remember that HVAC costs vary significantly by manufacturer, region, dealer and the time of year the unit is purchased. So, as you evaluate these systems and comparison shop, be sure to get local or regional price quotes. Some of the best savings and deals can come from government programs offering rebates, tax incentives or interest-free loans.

Thomas Kirk *writes for the Cooperative Research Network, a service of the National Rural Electric Cooperative Association.*

With any HVAC system, taking some easy and inexpensive energy-saving measures will maximize your home's efficiency.

- Add caulk and weatherstripping around doors and windows.
- Add insulation to attics and exposed walls.
- Move furniture or obstacles away from vents.
- Close blinds or curtains during the day to keep heat out, or open them to allow more heat in.



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Energy-Saving Tips for Summertime

The average home requires hundreds of dollars a year to pay for energy costs. Smart habits can lower your energy bills and help save the environment.

▶ Turn up your thermostat. Set your thermostat to 78 degrees when you are home and 85 degrees or off when you are away. Using ceiling or room fans allows you to set the thermostat higher because the air movement cools the room. Always take into account health considerations and be sure to drink plenty of fluids in warm weather.

▶ To help minimize peak loads for your electric cooperative, avoid running your appliances during peak hours, 4 to 6 p.m.

▶ Do your laundry efficiently by using the warm- or cold-water setting for washing your clothes. Always use cold water to rinse clothes.

▶ Line-dry clothes whenever you can. When you need to use the dryer, run full loads, use the moisture-sensing setting, and clean the lint trap after each use.

▶ Operate swimming pool filters and cleaning sweeps efficiently. Reduce the operating time of your pool filter and automatic cleaning sweep to four to five hours during off-peak time.

GOODLUZ | ISTOCK | THINKSTOCK

Using a microwave oven instead of the stove cuts cooking time and energy costs.

▶ Turn off appliances, lights and equipment when not in use.

▶ Unplug electronic devices and chargers when they aren't in use—most new electronics use electricity even when switched off. Turn computers and printers off at a power strip.

▶ Unplug and recycle any spare refrigerator in the garage if you don't really need it.

▶ Opt for a microwave. Nothing is more energy efficient for cooking than your microwave. It uses two-thirds less energy than your stove.

▶ Push a button to wash your dishes. It may come as a surprise to know that your dishwasher can use less water than washing dishes by hand. But remember to only wash full loads and then let dishes air-dry to save even more.

▶ Fill up the fridge. Having lots of food in your fridge keeps it from warming up too fast when the door is open, so your fridge doesn't have to work as hard to stay cool. The same is true for the freezer, too.

Lyntegar Electric Cooperative

P.O. Box 970, Tahoka, TX 79373

Operating in Borden, Dawson, Gaines, Garza, Hockley, Lynn, Martin, Terry and Yoakum counties

CEO
Greg Henley

BOARD OF DIRECTORS
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Kevin Mitchell, *New Home*

COOPERATIVE OFFICES

Tahoka 1807 Main St.
(806) 561-4588 or **561-4811**

Lamesa 2013 S. Highway 137
(806) 872-2632

Sundown 307 S. Slaughter
(806) 229-3741

Seagraves 1681 Highway 82-385
(806) 387-3002

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For information during office hours and outages after hours

CALL US
(806) 561-4588 local or
1-877-218-2308 toll-free

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lyntegar.coop

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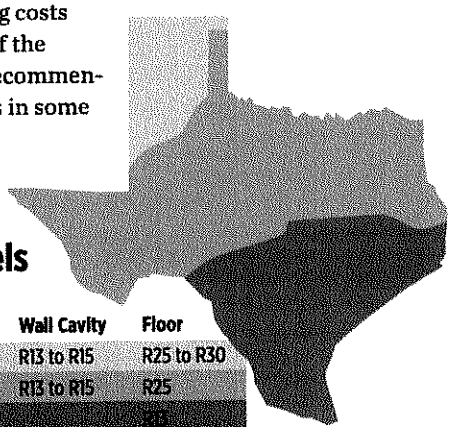
Insulate for Comfort and Savings

BY JAMES DULLEY

Checking your home's insulating system is one of the fastest and most cost-efficient ways of using a whole-house approach to reduce energy waste and maximize your energy dollars. A good insulating system includes a combination of products and construction techniques that provide a home with thermal performance, protect it against air infiltration and control moisture. You can increase the comfort of your home while reducing your heating and cooling needs by up to 30 percent by investing just a few hundred dollars in proper insulation and weatherization products.

Adequately insulating a home saves money for homeowners every month. It also helps conserve vital energy resources—energy-efficient houses help lower air pollution emissions from the combustion of fuels for heating, air conditioning and ventilation.

Check the insulation in your attic, ceilings, exterior and basement walls, floors and crawlspaces to see if it meets the levels recommended for your area. Insulation is measured in R-values—the higher the R-value, the better your walls and roofs will resist the transfer of heat. The U.S. Department of Energy recommends ranges of R-values based on local heating and cooling costs and climate conditions in different areas of the nation. The map at right shows the DOE recommendations for your area. State and local codes in some parts of the country may require lower R-values than the DOE recommendations, which are based on cost-effectiveness.



Recommended Insulation Levels

New, Wood-Framed Homes

Heating System	Attic	Cathedral Ceiling	Wall Cavity	Floor
All	R38 to R60	R30 to R38	R13 to R15	R25 to R30
All	R30 to R60	R22 to R38	R13 to R15	R25
Gas, Oil, Heat Pump, Electric Furnace	R30 to R60	R22 to R38	R13 to R15	R13 to R25

Where to Insulate

Adding insulation in the attic and to walls, floors, basements and crawlspaces may be the best way to improve your home's energy efficiency.

Insulation Types

Insulation can be made from a variety of materials, but it usually comes in one of four forms—batts, rolls, loose-fill and rigid foam boards. Each type is made to fit in a different part of your house.

Batts are made to fit between the studs in your walls or between the joists of your ceilings or floors. Batts are usually made of fiberglass or rock wool.

Rolls or blankets are also usually made of fiberglass and can be laid over the floor in the attic.

Loose-fill insulation, usually made of fiberglass, rock wool or cellulose, is blown into the attic or walls. Cellulose is made from recycled materials treated with fire-retardant chemicals.

Rigid foam boards are lightweight and provide structural support, and they generally have an R-value of 4 to 7 per inch. Rigid board insulation is made for use in confined spaces such as exterior walls, basements, foundation and stem walls, concrete slabs and cathedral ceilings.

Lyntegar Electric Cooperative

P.O. Box 970, Tahoka, TX 79373

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Tahoka 1807 Main St.
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Your Home's Electrical System

Electricity plays an essential role in how our homes operate. Whether watching TV, powering heating and cooling systems or charging a cellphone, we rely on our home's electrical system to provide us with power when and where we need it.

Electrical Safety Foundation International can help you understand the basics of how electricity is distributed around the home so you can keep this important system properly maintained and in safe working condition.

Electricity enters your home through a service head from a series of outdoor power lines or an underground connection. A typical service head consists of two 120-volt wires and one neutral wire working in tandem to deliver power to lights and appliances around the home.

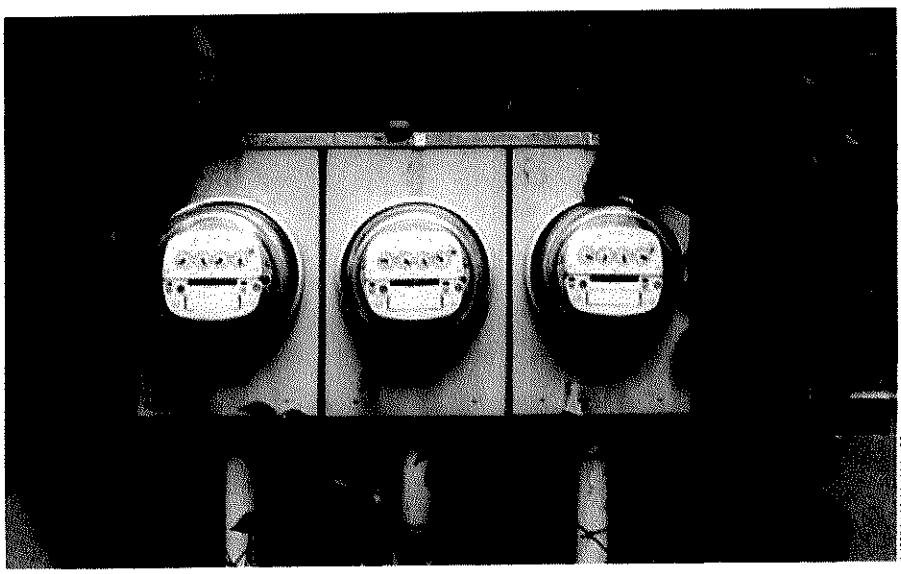
The 120-volt circuits use one phase of the electrical service to power standard home appliances. However, certain larger appliances—such as water heaters, electric ranges or clothes dryers—require a 240-volt circuit, which is created using both 120-volt wires and the neutral wire.

The electric meter is mounted outdoors where electricity enters your home. This device is used to measure the amount of electricity that is consumed in your home. The meter is monitored by your electric utility company and is protected by law. Tampering with it is both extremely dangerous and illegal.

The electrical service panel is the central distribution point for delivering electricity to switches, outlets and appliances throughout the house. Located near the electric meter, the service panel is equipped with breakers or fuses that shut off power to the circuits if an electrical system failure occurs.

Grounding is the method used to connect an electrical system to the earth with a wire. Grounding adds critical protection against electric shock and electrocution by using a grounding rod to provide a third path for conducting electricity in the event of a short circuit or an overload. Grounding helps to protect the home electrical system itself, as well as anyone who works on the system, any appliances and equipment that are connected to it—and the people using the appliances: you and your family.

For a visual introduction to your home electrical system, go to the ESFI website at esfi.org to watch the Home Electrical System Safety video. You can also visit ESFI's Virtual Home for an interactive tour of a basic electrical system and the electrical devices commonly found in modern homes.



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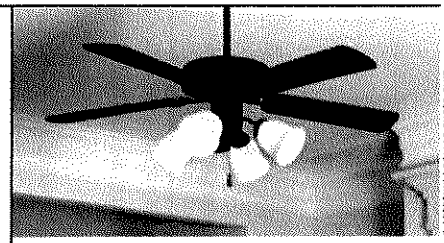

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Remodel To Save

One of the best reasons to remodel your home might be last thing on your mind when it's time to redesign, replace and redecorate: energy efficiency.

Whether you're updating a single room or overhauling the whole house, incorporate energy-saving features and products into the project while you're at it.

Here are 10 ways to make your remodeling project do double duty as an energy-efficiency effort:

1. Install LED fixtures on ceilings and walls, under kitchen counters and along stairs.

2. Move your refrigerator away from any heat-producing appliances that make it work harder to stay cold.

3. If your air-conditioning system is more than a decade old, replace it with a new one. It's almost guaranteed to be more energy efficient.

4. Installing double-paned windows can save you up to 18 percent on heating and cooling bills.

5. Ask the contractor who's poking around inside your home's walls, ceilings or attic to check your insulation.

6. Get a programmable thermostat. For every degree you back off the AC over an eight-hour period, you save 1 percent on your cooling bill.

7. Ask your contractor to install ceiling fans in the kitchen, bedrooms, family room and porches.

8. If you're buying new appliances, choose a refrigerator, freezer or dishwasher with the Energy Star label.

9. Consider adding skylights to invite natural daylight into your rooms.

10. Shade the house on the sunny side. Strategically placed shade trees can reduce your home's energy consumption by up to 30 percent.