

**HEARING TO RECEIVE TESTIMONY ON S. 3102,
THE RURAL ENERGY SAVINGS PROGRAM ACT**

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY, SCIENCE AND
TECHNOLOGY
OF THE
COMMITTEE ON AGRICULTURE,
NUTRITION, AND FORESTRY
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS
SECOND SESSION

—————
JUNE 17, 2010
—————

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry



Available via the World Wide Web: <http://www.agriculture.senate.gov>

U.S. GOVERNMENT PRINTING OFFICE

66-271 PDF

WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

SUBCOMMITTEE ON ENERGY, SCIENCE AND TECHNOLOGY

MICHAEL BENNET, Utah, *Chairman*

KENT CONRAD, North Dakota	JOHN THUNE, South Dakota
E. BENJAMIN NELSON, Nebraska	RICHARD G. LUGAR, Indiana
SHERROD BROWN, Ohio	PAT ROBERTS, Kansas
AMY KLOBUCHAR, Minnesota	MIKE JOHANNNS, Nebraska
DEBBIE STABENOW, Michigan	CHUCK GRASSLEY, Iowa
KIRSTEN E. GILLIBRAND, New York	JOHN CORNYN, Texas

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

BLANCHE L. LINCOLN, Arkansas, *Chairman*

PATRICK J. LEAHY, Vermont	SAXBY CHAMBLISS, Georgia
TOM HARKIN, Iowa	RICHARD G. LUGAR, Indiana
KENT CONRAD, North Dakota	THAD COCHRAN, Mississippi
MAX BAUCUS, Montana	MITCH MCCONNELL, Kentucky
DEBBIE STABENOW, Michigan	PAT ROBERTS, Kansas
E. BENJAMIN NELSON, Nebraska	MIKE JOHANNNS, Nebraska
SHERROD BROWN, Ohio	CHARLES GRASSLEY, Iowa
ROBERT CASEY, Jr., Pennsylvania	JOHN THUNE, South Dakota
AMY KLOBUCHAR, Minnesota	JOHN CORNYN, Texas
MICHAEL BENNET, Colorado	
KIRSTEN GILLIBRAND, New York	

ROBERT HOLIFIELD, *Majority Staff Director*

JESSICA L. WILLIAMS, *Chief Clerk*

MARTHA SCOTT POINDEXTER, *Minority Staff Director*

ANNE C. HAZLETT, *Minority Chief Counsel*

CONTENTS

	Page
HEARING(S):	
Hearing to Receive Testimony on S. 3102, The Rural Energy Savings Program Act	1

Thursday, June 17, 2010

STATEMENTS PRESENTED BY SENATORS

Lincoln, Hon. Blanche L., U.S. Senator from the State of Arkansas, Chairman, Committee on Agriculture, Nutrition, and Forestry	9
Bennet, Hon. Michael F., U.S. Senator from the State of Colorado, Chairman, Subcommittee on Energy, Science, and Technology	1
Lugar, Hon. Richard G., U.S. Senator from the State of Indiana	3

Panel I

Merkley, Hon. Jeff, U.S. Senator from the State of Oregon	4
---	---

Panel II

Elgohary, Nivin, Acting Assistant Administrator, Rural Development Rural Utility Service Electric Program, U.S. Department of Agriculture, Washington, DC	6
---	---

Panel III

Singer, Kent, Executive Director, Colorado Rural Electric Association, Denver, CO	11
Hanesworth, William, Vice President and General Manager, Air Conditioning Division, Rheem Manufacturing Company, Fort Smith, AR	13

APPENDIX

PREPARED STATEMENTS:	
Elgohary, Nivin	22
Hanesworth, William	31
Singer, Kent	36

**HEARING TO RECEIVE TESTIMONY ON S. 3102,
THE RURAL ENERGY SAVINGS PROGRAM ACT**

Thursday, June 17, 2010

UNITED STATES SENATE,
SUBCOMMITTEE ON ENERGY, SCIENCE, AND TECHNOLOGY,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC

The committee met, pursuant to notice, at 9:31 a.m., in Room 328A, Russell Senate Office Building, Hon. Michael Bennet, Chairman of the subcommittee, presiding.

Present or submitting a statement: Senators Bennet, Lincoln (ex officio), and Lugar.

**STATEMENT OF HON. MICHAEL F. BENNET, U.S. SENATOR
FROM THE STATE OF COLORADO, CHAIRMAN, SUB-
COMMITTEE ON ENERGY, SCIENCE, AND TECHNOLOGY**

Senator BENNET. Good morning and welcome to this hearing of the Senate Agriculture Committee's Subcommittee on Energy, Science, and Technology. Hello, Senator Merkley. Thank you for joining me here today so we can hear testimony on S. 3102, the Rural Energy Savings Program Act.

Today, we have the privilege of hearing testimony from Senator Jeff Merkley, of Oregon; Nivin Elgohary, the Acting Assistant Administrator of Rural Development's Electric Program at USDA. I am very pleased that Kent Singer is here today, the Executive Director of the Colorado Rural Electric Association, and William Hanesworth, Vice President and General Manager of the Rheem Air Conditioning Division, who is here from Fort Smith, Arkansas.

I am going to make a short opening statement on today's hearing and then I will recognize other Senators as they arrive to make a statement in the order in which they arrive.

In my home State of Colorado, there is tremendous enthusiasm surrounding the push toward what we call the new clean energy economy. We have seen the clean energy economy take root in areas all across our State, in rural and urban communities alike. But with clean energy projects cropping up all across the State, people in rural Colorado are wondering what they can do to bring the clean energy economy a little closer to home. They are wondering what role small towns can play in making energy more affordable to help usher in an energy independent future.

It is my view that the right way to transform our energy economy is one in which we all share in the economic benefits. One way we can help rural America in particular harness these economic benefits is to rethink not only how we produce our energy, but how

we can make better more efficient use of that energy in our rural communities. Energy efficiency is the low-hanging fruit in the drive to reduce our overall energy consumption and diversify the kinds of energy sources we use.

As we are likely to hear today, homes in rural areas tend to be older and less energy efficient. As a result, working families in rural America tend to spend a larger proportion of their income on energy and utility costs than families in urban areas. So simple efficiency upgrades can help lower energy costs and help ease the burden on already tight family budgets. Yet up-front costs sometimes—often—put these improvements out of reach for families struggling to make ends meet.

The bipartisan bill before us this morning provides a common sense solution to this very pervasive problem in rural America. Our purpose is to create new jobs for rural Americans, to save families money and help the environment, a win-win-win. By overcoming the high up-front costs of energy efficiency improvements, this bill puts simple energy efficiency improvements within reach for families all across rural America. That is something we can all get behind, as Republicans and Democrats, and in a time when partisan gridlock prevents a lot from getting done, this bill offers an opportunity for both parties to work together to get the job done for the American people.

The Rural Energy Savings Program Act authorizes \$4.9 billion in lending authority through USDA's Rural Utilities Service. I want to emphasize here that this is a fiscally responsible way to solve a very real problem for families in rural America because the resources are distributed through loans, not grants. The American taxpayer will be paid back for every dime put into these innovative energy efficiency loans.

Once the bill is passed into law, and I hope today's hearing marks another step forward in that process, a rural cooperative would apply to RUS to borrow money to fund these local energy efficiency programs. A no-interest loan is then given to the cooperative, which they in turn lend to rural homeowners and small businesses. The homeowners and small businesses use the money to help cover the up-front costs of energy efficiency improvements. These costs are paid back to the co-op over a ten-year time period as an addition onto that homeowner's or small business's monthly electric utility bill. Those additional costs to the homeowners and small businesses will be substantially offset by the cost savings stemming from the installed energy efficiency improvements.

This bill will help rural economies recover by creating thousands of good paying jobs in my home State of Colorado and across the country. These jobs serve several important public purposes. They save families money and they make us more secure by supporting our energy independence and reducing harmful pollution. These are jobs that will be created right here in America, and they can't be shipped overseas.

The Rural Energy Savings Program is a common sense, bipartisan bill supported by a broad coalition of partners, and I look forward to having today's hearing and subsequently getting it passed into law.

In my home State, the bill has the support of the Colorado Rural Electric Association, the Rocky Mountain Farmers Union, and Environment Colorado, a diverse coalition that is working toward a new approach to an old problem. I thank them for their support and my colleagues for their leadership. Working together, I am confident we can help pass this bill into law, and in doing so, help ensure that we move forward into the new energy economy and that rural America is not left behind.

With that, Senator Lugar, would you like to make a statement? Thank you for being here.

**STATEMENT OF HON. RICHARD G. LUGAR, U.S. SENATOR
FROM THE STATE OF INDIANA**

Senator LUGAR. Thank you, Mr. Chairman. I appreciate the opportunity to discuss this important legislation. I applaud you for holding this hearing today. I would like to extend a warm welcome to all of our guests this morning, but in particular, I would like to thank and recognize Senator Merkley, for his leadership on S. 3102, the Rural Energy Savings Program Act. As an original cosponsor, I enjoyed working with him and others on this legislation. I believe it provides a positive way forward for energy efficiency for rural America.

More than 42 million Americans live in rural communities and many of these Americans reside in homes that are significantly more inefficient than those typically found in urban communities. In fact, USDA has found that rural households spend \$200 to \$400 more per year on their utility bills than comparable urban households. This utility bill disparity is significant given that rural households earn \$10,000 a year less than the national average, meaning that fewer rural households are capable of affording the up-front cost to increase the energy efficiency of their homes.

Accordingly, I am pleased to be an original cosponsor of the Rural Energy Savings Program Act, which permits members of Rural Electric Cooperatives to receive long-term low-interest loans to improve the energy efficiency of their properties with no up-front costs. These loans would be required to be repaid in ten years through monies saved on utility bills. Not only will this legislation lower utility bills for individual rural households and businesses, it will also improve the ability of Rural Electric Cooperatives to keep pace with increased consumer electricity demand.

The Rural Energy Savings Program Act is projected to create nearly 26,000 jobs, spur retrofits in up to 1.6 million rural homes, and save rural households hundreds of dollars a year after the loans are repaid, and eliminate the need for new generating capacity to power 625,000 homes in coal-dependent areas.

Mr. Chairman, I recently introduced a bill referred to as the Lugar Practical Energy and Climate Plan, which largely incorporates the Rural Energy Savings Program Act and other similar policies that fix the major leaks in our energy system. My bill focuses on three areas of policy: Foreign oil reduction, energy efficiency, and power diversification. In writing my bill, I focused on energy policies that are achievable, cost effective, and most importantly, that save American consumers and businesses money.

Independent analysis has estimated that by the year 2030, my plan would reduce foreign oil dependence by 40 percent, energy consumption by 11 percent, average household electric bills by 15 percent, and greenhouse gas emissions by 20 percent, or about 1.6 billion metric tons, the equivalent of taking more than 240 million cars off our highways. The bill we are considering today is a very considerable part of that program.

I look forward to today's hearing testimony on the Rural Energy Savings Program, and again, I thank the Chair for holding this very timely hearing.

Senator BENNET. Thank you, Senator Lugar, and thank you for your statement. Thank you for being here.

I would also like to extend a warm welcome to our colleague, Senator Merkley. Thank you for your leadership, and we look forward to hearing from you as the lead sponsor of S. 3102. We are glad you are here. I am delighted that you introduced the bill and that you are providing testimony today. Senator Merkley?

**STATEMENT OF HON. JEFF MERKLEY, U.S. SENATOR FROM
THE STATE OF OREGON**

Senator MERKLEY. Good morning and thank you very much, Mr. Chairman and Senator Lugar. It is terrific to have both of you as original cosponsors of this bill. I also want to thank Senator Graham and Senator Shaheen, who were the other original cosponsors, and other members of the Agriculture Committee who are among the cosponsors, Senator Lincoln, Senator Brown, Senator Harkin, Senator Klobuchar, and Senator Stabenow.

This bill is designed for a simple but important purpose: To provide a cost-effective way to help rural residents and rural businesses participate in the clean energy economy by helping them invest in energy efficiency renovations for homes and buildings.

We all talk today about clean energy. As members of this committee are aware, energy efficiency is both the cleanest form of energy and the cheapest form of energy. That is a nice combination and a real contrast as we look at the challenges that we are seeing in the Gulf today.

In the current dire straits that our economy is in, energy efficiency is also a major opportunity for job creation. Since the recession began, we have lost 3.7 million jobs in manufacturing and construction. One in five construction workers is out of work. Energy efficiency renovation creates jobs in both of these sectors. It is estimated by some to be the most effective strategy for creating jobs per dollar expended by the Federal Government. Buildings use 40 percent of our energy, and so they must be a central focus for making progress on energy efficiency.

Energy efficiency renovations for buildings help create jobs for small businesses. More than 90 percent of construction firms employ fewer than 20 people. More than 60 percent of the manufacturers that create materials and equipment for energy renovations employ fewer than 20 people. And as the Chair pointed out in his remarks, these are jobs that cannot be sent overseas. These are jobs created here in America.

There are two important aspects of this bill's approach to energy efficiency, its rural focus and its financing strategy. First, in many

parts of our country and certainly in Oregon, our rural areas have been the hardest hit by the recession. In Oregon, many of these communities are forest-based communities, and with the collapse of the housing market, timber prices are at an all-time low and unemployment is at an all-time high. Families need jobs and they need help with their energy bills.

Second, Rural Electric Cooperatives often have higher costs of doing business. During the New Deal, the cooperatives were formed specifically because the cost of connecting rural customers spread out over very long distances meant that private utilities weren't willing to provide the service. While those Rural Cooperatives still have the fewest customers per mile of distribution line, in even a State like Oregon, where we have access to low-cost hydropower, that means higher costs and higher electric rates for many rural residents and businesses.

The financing strategy for this bill is important because it helps families and businesses cover the up-front costs of renovations. You can imagine that it is very difficult to consider buying a whole set of, say, double-paned vinyl windows. But when you realize the energy savings on your electric bill or on your heating bill are going to be greater than the costs of the loan that you are getting to do it, then it becomes, well, this is a win-win in all respects.

Our scarce Federal dollars go even further with financing than with grants or rebates because the government does get repaid, a critical element as we wrestle with the deficit. For financing programs, we only need to appropriate funds for the anticipated losses. In the case of the Rural Energy Savings Program, by appropriating \$775 million, we can fund a lending volume of \$4.9 billion.

In the case of setting up financing through co-op utilities, there is an even greater benefit because they can offer the on-bill financing. It makes it very convenient for customers to repay, very low servicing overhead.

That is the core concept, helping rural co-ops offer low-cost loans to customers which they can repay right on their utility bills. We do this by building off existing programs at the Rural Utilities Service, which already makes loans to rural electric co-ops. The bill proposes to have RUS make zero-interest loans to co-ops and then allow those co-ops to finance energy efficiency renovations at an interest rate of three percent.

In addition, the bill offers jump start grants to help co-ops launch or expand energy efficiency programs. It also includes programs for training and for technical assistance, as well as for measurement and verification of energy efficiency renovation work to make sure that the work is high quality and it is delivering the savings the rural customers are counting on.

In closing, this is a win-win-win for our rural communities, creates jobs, helps people reduce their energy bills, and, of course, it improves environmental impacts of electricity generation.

Thank you for your cosponsorships. Thank you for the committee's interest. It is a pleasure to be here today.

Senator BENNET. Thank you, Senator Merkley.

Senator Lugar, do you have any comments?

Senator LUGAR. Mr. Chairman, let me just ask, and this is much more of a procedural question, obviously, all three of us are strong-

ly in favor of this piece of legislation, so we do not have a great number of questions to ask each other except how this might proceed. I am just curious as to whether you know the will of the Chairman as to whether she plans to have a business meeting in which this might be considered.

Secondly, if such a meeting were to occur, and I presume a majority of members would vote in favor of the legislation, what its prospects may be on the floor, whether there is a reasonable chance of unanimous consent passage in which members are polled by telephone as opposed to floor activity, which is the normal course, I think, for many bills now that are not monumental in character, given the difficulties on the floor. Do you have any—

Senator BENNET. Chairman Lincoln will be here later this morning, so I will ask her when she arrives. I don't know, Senator Merkley, whether you have got—so we will figure that out today. Thank you.

Senator LUGAR. Thank you.

Senator BENNET. Thank you.

Senator MERKLEY. Thank you very much.

Senator BENNET. Thank you for being here. That concludes our first panel. Thank you again to Senator Merkley for joining us here today.

We will now hear from Nivin Elgohary—I have been practicing this all night long—

[Laughter.]

Senator BENNET. —Elgohary, and I will say that today is her birthday.

[Applause.]

Senator BENNET. I didn't need to practice that. Happy birthday. She is the Acting Assistant Administrator with the USDA Rural Development Electric Program. She has been Acting Assistant Administrator for the Electric Program since January 2009. Ms. Elgohary is responsible for directing and coordinating all activities pertaining to the Rural Electric loan and grant programs. Ms. Elgohary's tenure with the USDA began in 1999 as a loan specialist with the Power Supply Division of the USDA Rural Development Electric Program. Her experience also includes time in the Office of the Program Advisor for the USDA Rural Development Telecommunications Program.

Thank you for joining us today. I look forward to hearing your testimony and asking some questions. You have got about five minutes to deliver your remarks, and please go ahead.

STATEMENT OF NIVIN ELGOHARY, ACTING ASSISTANT ADMINISTRATOR, RURAL DEVELOPMENT RURAL UTILITY SERVICE ELECTRIC PROGRAM, U.S. DEPARTMENT OF AGRICULTURE

Ms. ELGOHARY. Thank you, Mr. Chairman, and thank you for the birthday wish. Also, thank you, members of the committee, for inviting me to discuss energy efficiency solutions to the U.S. Department of Agriculture Rural Development Rural Utility Service Electric Program.

The Rural Utility Service, or RUS, Electric Program is the successor to the Rural Electrification Administration established in 1935. Today, RUS has over 650 borrowers with an outstanding

portfolio of \$42 billion and a delinquency rate of less than one-half of one percent. Forty-two-point-seven percent of our borrowers serve at least one poverty county, and 77 percent serve at least one out-migration county in the United States. Our borrowers provide electric service to about 17 percent of the poverty counties in the U.S. and 39 percent of the out-migration counties.

RUS is authorized to provide loans for construction and operation of generating plants and electric transmission and distribution lines. RUS is also authorized to provide loans to fund, furnish, and improve electric service, including demand-side management and energy conservation. RUS is also authorized to defer borrower principal and interest payments on RUS direct debt as compared to the Federal financing debt which is guaranteed by RUS.

The Energy Resource Conservation Program allows our borrowers to defer principal payments and reamortize the deferment over seven years. The borrowers, in turn, may use these deferments to make funds available for energy efficiency and conservation measures. The first ERC agreement was signed with the borrower in 1981. To date, we have 43 agreements with a total of \$64 million in deferments. Although the ERC Program has been available for approximately 30 years, the loans for eligible deferments are declining. Only RUS direct loans may be deferred. RUS has not received direct funding appropriated since 2007.

Recently, Section 6101 of the 2008 farm bill amended Sections 2 and 4 of the Act to explicitly authorize loans to borrowers for energy efficiency. This amendment codified a longstanding USDA policy. We are currently working on regulation to implement this farm bill provision.

S. 3102 is an energy savings loan program for rural areas. It provides \$4.9 billion in loan program at a cost of \$755 million. These funds would be available for five years or until the funds are fully obligated. S. 3102 also includes grants, identified as a jump start grant, for each loan, not to exceed four percent of the loan amount.

If enacted, eligible applicants would be able to borrow the funds from RUS and re-lend these funds to their consumers for energy efficiency measures. The grant funds may be used to defray the costs of implement energy efficiency re-lending programs. The eligible applicant will submit to RUS an energy efficiency plan and request for a loan. RUS will then approve the loan request upon receipt and review the applicant's plan along with any existing application requirements and lending policies. Once the loan is approved, the borrower will receive a zero-interest loan for up to ten years. The borrower will use the loan proceeds to provide low-interest loans to their members for energy efficiency measures.

The consumer's loan may carry an interest rate of no higher than three percent. The consumer's energy savings as a result of the energy efficiency measures will be reflected on the electricity bill. The savings will be used to pay back the energy efficiency measures over a ten-year period.

The cost of this Rural Energy Savings Loan Program as suggested in S. 3102 is \$993 million. The cost includes \$755 million as the cost of the direct loan program and an additional \$238 million for grants, technical assistance, administrative expenses for RUS to implement this program.

Mr. Chairman, I want to thank you for the opportunity to discuss RUS energy efficiency efforts and to provide expert testimony on S. 3102. I would be glad to answer any questions the members of the subcommittee may have.

[The prepared statement of Ms. Elgohary can be found on page 22 in the appendix.]

Senator BENNET. Thank you very much for your testimony. I just have a couple of questions.

Do you have a sense—can you say yet whether the administration supports S. 3102?

Ms. ELGOHARY. At this current time, the administration does not have a position on S. 3102.

Senator BENNET. Do you know when the USDA is likely to be able to have a position on the bill?

Ms. ELGOHARY. I am not aware.

Senator BENNET. Okay. Senator Lugar, do you have any questions?

Senator LUGAR. Mr. Chairman, I tried to follow carefully your description of authorization and appropriation. I gather that even though the administration has not taken a position, nor has the Secretary of Agriculture, that the money that is envisioned in S. 3102 is available, is that correct? In other words, if, in fact, the administration decided this was a great idea and the Secretary was directed to proceed, are the steps in place now in which the money has been authorized and appropriated so that action can be taken in a timely way?

Ms. ELGOHARY. RUS is authorized to do energy efficiency and we could do it out of our existing appropriations. However, it would not be at the same cost that is projected in S. 3102. S. 3102 identifies a zero-interest loan to the borrower. Our borrowers currently take loan funds out of our existing FFB portfolio. The long-term interest rate there is about 4.3 percent for a 30-year loan.

Senator LUGAR. Granted, that is the current situation. I suppose my question is, does the passage of this legislation then change those circumstances, at least for the loans that are envisioned under the legislation, leaving aside what the current predicament may be or the past ideas. Do you have a response to that?

Ms. ELGOHARY. We can—

Senator LUGAR. In other words, are we stuck at the old rates, notwithstanding the fact this is supposed to be a zero-loan situation.

Ms. ELGOHARY. We will get back to you with an answer to that question.

Senator LUGAR. Well, I would appreciate it, because that is material in terms of the timeliness of this. Let us say that we have the good fortune that our Chairman is persuasive with the President and the President says, let us get on with this, that it makes a lot of sense in terms of energy efficiency in the country. But the President then is stymied. He says, what is going on out there at USDA? So I just want to make sure what is going on at USDA, kind of grease the skids. That may be the wrong terminology, but prepare the way for successful action on this bill.

Ms. ELGOHARY. I can share some process, maybe, that might help to answer the question. RUS currently, as part of our normal pro-

cedures in funding, we find two findings in any loan application, whether it be for energy efficiency, plan improvements or Consumer Connects. There is a financial finding and there is an engineering finding. But prior to those findings being made, we require that our borrowers submit to us long-range plans, loan forecasting requirements, and within those studies that they submit to us, energy efficiency is a component of the product of that study.

Senator LUGAR. Is the study now for the co-op as opposed to the individual rural borrower? I am just thinking of a farmer and then his or her home who wanted to make one of these loans. Is that person required to make this kind of study, or is—

Ms. ELGOHARY. No, no, no, no.

Senator LUGAR. No?

Ms. ELGOHARY. No. The loans would be made to the electric co-op and then the electric co-op, in turn, would market the energy efficiency efforts with their consumers, whether it be the farmer or a local business or a homeowner. That consumer, a member of the electric cooperative, would make a loan with the co-op over a certain period of time and pay that loan back through their energy bill. So RUS would be making the loan to the electric utility.

Senator LUGAR. Fine. Thank you. And you are going to get back to us now as to whether things are underway in the event the President says yes and USDA says yes, quite apart from our saying yes to move this situation.

Ms. ELGOHARY. Correct.

Senator LUGAR. Thank you.

Senator BENNET. I would like to echo Senator Lugar's point there and also say that if there are other suggestions the administration has for the bill, we would like to hear those, as well. I think that the reason it is such an appealing piece of legislation for a lot of us is, first, that it will allow much more retrofitting to be done in rural areas, but also the on-bill financing component of it is not available today and I think would make a big difference to our communities and to our families. So if you could get back to us with suggestions on the legislation, we are all ears.

Ms. ELGOHARY. Okay.

Senator BENNET. Thank you very much for being with us today. Thank you for your testimony, and we appreciate your taking the time. That concludes our second panel.

We are delighted to be joined today by Chairman Lincoln, and I am going to turn the microphone over to her for some comments on the bill.

**STATEMENT OF HON. BLANCHE L. LINCOLN, U.S. SENATOR
FROM THE STATE OF ARKANSAS, CHAIRMAN, COMMITTEE
ON AGRICULTURE, NUTRITION, AND FORESTRY**

Chairman LINCOLN. Well, thank you, Mr. Chairman. I certainly appreciate all of your hard work and your willingness to hold this very important hearing on the Rural Star bill. I do think it is a key proposal that will help us immensely in creating jobs and increasing energy conservation.

I know on the Energy Committee, we found that in our bipartisan energy bill we passed there that the conservation measures actually did save as much or more than any of the renewable ener-

gies we produced and initiated. And so conservation is such a critical part of the overall equation.

But it does all of those things, all the while lowering utility bills for rural families. And having lived out on that rural county road myself, I know how important that is to the families, the hard-working families that live out there.

So creating this rural retrofit program is a partnership, which I am all about partnerships with the rural co-ops and will only enhance its success as a partnership, I think, and I am very grateful to you for that.

I am very proud to be a cosponsor of this Rural Star legislation that will help put Arkansans back to work and help consumers save on their energy costs, and I think, ultimately, those really do meet so many of the goals and aspirations we have in moving ourselves from an old energy economy to a new energy economy, obviously to not only improve in terms of our conservation and environment, but also in terms of consumers and what we can do for them.

There is a company with a demonstrated record of success in working with our co-ops as well as employing Arkansans and it is one of our good corporate citizens in Arkansas, Rheem. I am pleased that they are represented with a witness here today. Rheem employs about 1,300 individuals at its Fort Smith, Arkansas, facility and the head of their Air Conditioning Division in Fort Smith is Bill Hanesworth, who is here on their behalf today.

Mr. Hanesworth, I did want to welcome and make sure I gave him a good Arkansas welcome so he felt at home here at the Agriculture Committee and before your subcommittee, Mr. Chairman, and I look forward to his testimony and all of the other testimony here. But just to say that Rheem has been a wonderful corporate citizen in our State, not only in terms of employing, but also in terms of looking at innovative ways to work with both the electric co-ops and certainly in terms of energy efficiency in the manufacturing products that they produce.

So we are excited about all that and certainly excited about you having this hearing and grateful to you for doing that today. So thank you very much.

Senator BENNET. Thank you, Chairman Lincoln. And as you know, but Mr. Hanesworth might not, my wife is from Marianna, Arkansas, so there is a lot of Arkansas at the subcommittee today.

So we will now welcome the final panel, Kent Singer, Executive Director of the Colorado Rural Electric Association, and William Hanesworth, Vice President and General Manager of Rheem Air Conditioning Division, Fort Smith, Arkansas.

Kent Singer is the Executive Director of the Colorado Rural Electric Association. Previously, Kent was CREA's General Counsel since 1996 and has operated a successful law practice representing electric cooperatives in Colorado. In addition to representing CREA, he has been the Corporate Counsel for Tri-State Generation and Transmission Association, General Counsel for Holy Cross Electric Association, and counsel for Western United Electric Supply Association.

Bill Hanesworth is Vice President and General Manager of Rheem Manufacturing Company's Air Conditioning Division. He has served in that position since 2007.

Thank you both—thank you both for traveling all the way from your home States to be here today and for the important work that you do.

Once again, we would like to keep the remarks to about five minutes, and Mr. Singer, why don't you go ahead and start.

**STATEMENT OF KENT SINGER, EXECUTIVE DIRECTOR,
COLORADO RURAL ELECTRIC ASSOCIATION**

Mr. SINGER. Thank you very much, Mr. Chairman. It is a pleasure to be here. Thank you, Senator Lugar. It is an honor to appear before you this morning and I thank you for inviting me to provide the views of the Colorado Electric Cooperatives on S. 3102, the Rural Energy Savings Program Act.

CREA, the trade association that I represent, is a nonprofit group that represents the interests of Colorado's 22 electric distribution cooperatives as well as Tri-State Generation and Transmission Association. Tri-State is the power supplier for 18 of Colorado's electric co-ops. The remaining four co-ops receive their power supply from Xcel Energy in Colorado.

Colorado's electric co-ops provide electric service to approximately 75 percent of the land area of Colorado and approximately 25 percent of all electricity consumers in Colorado. Colorado's electric co-ops average about seven customers per mile of line and they serve some of the most economically challenged communities in Colorado. Many of our co-ops also serve territory that is some of the most challenging in the United States in terms of the terrain and the weather conditions.

Electric co-ops in Colorado and across the country have a straightforward mission: To provide reliable electric service at the lowest cost possible. Electric co-ops are nonprofit, member-owned utilities, and they were created not to make a profit for shareholders, but to provide affordable and reliable electricity to their member owners.

In that spirit, Colorado's electric co-ops have for many years provided information and advice to their member owners to help them manage their energy bills. This includes programs and incentives for their member owners to use electricity in an efficient and cost effective manner. These programs include rebates for energy efficiency appliances, time of day rates to encourage off-peak usage, and in some cases, direct loans for energy efficiency improvements.

Tri-State, the power supplier for 18 of our co-ops, has an Energy Efficiency Credits Program which provides cash rebates for efficient lighting, heating, and cooling systems, as well as for high-efficiency motors. This program has reduced overall demand in Colorado by 75 megawatts and waved approximately 80,000 megawatt hours of energy since its inception.

CREA believes that S. 3102, the Rural Energy Savings Program Act, is another tool that co-ops can use to enable their customers to maximize energy efficiency. The bill authorizes an on-bill financing program that allows co-op members to borrow money from the co-op for energy efficiency improvements at their homes and businesses and to pay back those loans through their monthly electric bills.

The program is a model of simplicity. Co-ops would be authorized to borrow no-interest funds from the RUS and in turn make low-interest loans, not to exceed three percent, to their residential or business consumers for the sole purpose of improving the energy efficiencies of those residences or businesses. No loan funds would be approved until an energy audit is performed by the co-op, an application for funds is approved by the RUS, and the project is completed in accordance with the plans contained in the application.

The Act requires that energy efficiency loans have a payback period of no more than ten years. This means that the savings to customers related to the energy efficiency improvement projects must be more than the amount of the loan and that customers will be able to repay the loan from those monthly savings on their energy bill. It also means that if the projects are not cost effective within a ten-year period, they will not be funded, and such a limitation, we believe, will put pressure on some energy efficiency technologies to bring costs down.

The program is designed also to minimize the impact on the Federal budget because it is primarily a loan program, not a grant program, and it requires repayment of loans to the Federal Government. The program does have a small grant component that enables co-ops to receive up to four percent of the loan amount in order to offset the up-front costs of initiating the program.

The program will also use the existing infrastructure at the RUS and the RUS loan protocols to evaluate loan applications, obligate funds, and advance them to the co-ops. The co-ops already have the billing capabilities and the consumer relationships that will enable them to deliver and administer the loans to their consumers.

The loan funds will not cover the entire cost of the program, however, because individual co-ops will incur certain costs to administer the program. The program is voluntary and individual co-ops will have to determine whether there is a need in their community that could be addressed with funds from the program.

CREA supports the bill because we believe there are co-op members in Colorado, as the Chairman has observed, that would benefit from energy efficiency improvements on their homes and who cannot afford to make the initial up-front investment in these improvements. The average initial costs of energy efficiency upgrades has deterred many co-op customers from making much-needed energy efficiency improvements. By providing low-interest funds, the Act would benefit rural Colorado by making homes and businesses more comfortable and energy efficiency and it would also create much-needed jobs in rural communities.

I thank you today for the opportunity to speak to you and I would be glad to address any questions you may have.

[The prepared statement of Mr. Singer can be found on page 36 in the appendix.]

Senator BENNET. Thank you, Mr. Singer. I do have a couple of questions. I wanted to start where you ended, which is could you share with the committee and the staff what kinds of energy efficiencies you think exist in our rural communities in Colorado and what are the kinds of things that your customers would do if they had access to this kind of on-bill financing?

Mr. SINGER. Yes, Mr. Chairman. As to the first part of your question, as far as energy efficiencies and the co-op system generally, you can really go from the first part of where energy is generated at the power plants to the transmission lines to the distribution system. So there are many sources of efficiencies along the entire stream of producing power. Both the G&T and the distribution co-ops have many investments that they could make to improve efficiencies.

At the end of the line for the distribution customers, the ones who pay the bill, I think in Colorado, our experience is that they are very interested in trying to find ways to reduce their monthly bill and our co-ops are fully engaged in promoting programs to help them do that. That is a tradition in the co-op program, is for our members, our managers, our directors, to find ways to help those folks at the end of the line. We don't have a profit motive. We are nonprofit entities. We are simply interested in providing reliable service at a low cost.

So our co-ops, both the G&T and the distribution co-ops, have programs in place today. We feel, though, that this would be a more comprehensive program that would provide a pool of funds and a process that would ramp up that effort. And in Colorado, I believe there are many co-ops who are anxious to get underway and try to benefit their customers at the end of the line.

Senator BENNET. Thank you for that, and I am going to go to Mr. Hanesworth, so I am going to hold my other questions. I don't know, Senator Lugar, whether you would like to wait or—

Senator LUGAR. I will wait until he is finished.

Senator BENNET. Okay. Mr. Hanesworth.

**STATEMENT OF WILLIAM HANESWORTH, VICE PRESIDENT
AND GENERAL MANAGER, AIR CONDITIONING DIVISION,
RHEEM MANUFACTURING COMPANY, FORT SMITH, ARKAN-
SAS**

Mr. HANESWORTH. Good morning, Chairman Bennet, Ranking Member Thune, and members of the subcommittee. Thank you for the opportunity to speak about the Rural Energy Savings Program Act. My name is Bill Hanesworth and I am Vice President and General Manager of Rheem Manufacturing Company. Rheem is a leading global producer of water heaters, air conditioners, furnaces, pool heaters, and boilers, and from our headquarters in Atlanta, we are proud to be a significant manufacturer and employer of thousands of people and market participant in the United States.

I lead our Air Conditioning Division, which is based in Fort Smith, Arkansas, and I especially wish to acknowledge Chairman Lincoln. We thank Senator Lincoln for her exceptional leadership, work, and support of our ability to compete in a rural America.

The bill would really help the people who work in our plant and similar jobs across the United States. The Fort Smith plant was completed in 1970 and is the home for more than 1,300 employees and many members of rural co-ops across Arkansas. It is where Rheem designs its gas furnaces, advanced electronics, condensing units, electric heat pumps. It is also where Rheem designs and manufactures its residential and commercial heating and cooling products.

The important legislative proposal before us known as the Rural Energy Savings Program Act would help support demand for the work of our Fort Smith team and other facilities across the country, enabling our dedicated employees to continue to design and build products to compete in a global marketplace.

Since our founding by the Rheem brothers in California in 1925, we have provided good manufacturing, research, and development and distribution jobs across this country. Rheem is an innovator and consistently designs increased efficiency into its products. In fact, Rheem invented the first tank water heater used in the United States. As a result, we are very interested in legislation and government programs which incentivize the reduction of energy costs and increase the demand for energy efficiency products.

We believe the Rural Energy Savings Program Act, in particular, is critically important because it lowers the cost of barriers for consumers to invest in energy efficient program solutions and to do so in partnership with rural co-ops, which will only enhance the program's success.

Rheem is proud to have substantial experience working with co-ops to offer its water heaters, air conditioners, furnaces, and heat pumps to the American public. Presently, we partner with nearly 300 co-ops across the country and we work hard to bring energy efficient products to meet the demands of those customers.

One such product is a unique rust-proof water heater which we appropriately call the Marathon. With a lifetime tank warranty, it is a popular product among co-ops, because in rural America, the water quality may not always be what would be optimal. The Rural Energy Savings Program would enable consumers to realize significant lifetime savings by lowering their ongoing energy expenses and by smoothing out the up-front cost of the kind of durable and efficient water heaters which we design in Alabama and manufacture in Minnesota, the home State of Senator Klobuchar, and we appreciate her support.

As you know, the availability of low-interest financing through co-ops would allow homeowners and small businesses to more readily afford energy efficient products. Generally, consumers' heating and cooling and water heating bills represent the majority of their energy spend, which was mentioned earlier today. We at Rheem take this seriously and consistently work to reduce energy costs for the consumer.

Your constituents really need this bill. The economy has been especially hard on those, especially whose access to credit has been substantially curtailed in recent years. Therefore, it is important that the government find innovative public solutions and avenues to keep people working and the money in their pockets.

This Act encourages and assists consumers to purchase better products that will reduce their energy costs and improve their quality of life. I commend this subcommittee for considering it today. The legislation will benefit consumers in the program and our country as a whole. The policy will improve our country's carbon footprint. It will reduce the cost of operation for small businesses. It will enable consumers to save money and have access to affordable credit. And it will support job creation, a critical point in our economic recovery.

In the words of Chairman Bennet, this bill would help rural economies recover by creating thousands of good-paying jobs in Colorado and across the country. Additionally, cosponsor Senator Lindsey Graham described the bill as a plan that will help consumers, particularly those in rural areas of the State and nation, become more energy efficient and lower their electricity cost.

Picking up on Senator Graham's point, we at Rheem especially are proud of the relationship with McCall's Distribution Company in South Carolina, which represents the very constituency to whom this legislation is directed. We could not agree more with Senators Bennet and Graham and strongly encourage Congress to move forward to establish the Rural Energy Savings Program.

In closing, I would like to note the committee has been writing agriculture policy for over 200 years. Throughout its history, members of this body have tackled critical energy and rural development issues. This is another such important initiative. We are hopeful this bill can become law and provide energy conservation incentives, economic growth, and savings to rural America.

Toward that end, we look forward to working with you and thank you for the opportunity to speak with you today, and I welcome any questions that you may have.

[The prepared statement of Mr. Hanesworth can be found on page 31 in the appendix.]

Senator BENNET. Thank you. Thank you for your excellent testimony, both of you. You both came in at exactly five minutes, so we appreciate that, I have to say.

[Laughter.]

Senator BENNET. I also want to say to Mr. Singer how much I appreciate your characterization of this bill, as you did in your testimony, as a model of simplicity. I can't tell you what high praise that is in this place, in particular, to hear those words.

You did mention in your testimony that there might be some increased administrative costs as a result of this, and I wonder whether you have got some suggestions today about how we might be able to help with that, or if anything occurs to you going forward, we certainly would like to hear that because we want to make this as user friendly as possible.

Mr. SINGER. And I appreciate that, Mr. Chairman. I don't have any specific recommendations. I think the point I was trying to make is that although the government is funding this program, or would be if the Act passes, the co-ops still would have some skin in the game.

Senator BENNET. Right.

Mr. SINGER. They have to make a commitment to this, and whether that is by having some additional contract folks or others to administer the program, there is some expense. They have a commitment to it. And so I am just trying to make the point that it is not just a free ride for the co-ops.

Senator BENNET. Right.

Mr. SINGER. They will have to invest in this, as well.

Senator BENNET. And it is voluntary, as well.

Mr. SINGER. That is correct. Yes.

Senator BENNET. A question for both of you to share with the committee and with the staff. What kinds of changes and invest-

ments would you expect typical rural homeowners to make if they had the support of a loan like this? What are the things that they wish they could do today but aren't doing because they can't incur the up-front expense? Either one. Mr. Hanesworth, would you like to start?

Mr. HANESWORTH. Recently, especially in the last few years, one of the biggest obstacles to having people upgrade their systems has been the lack of affordable credit. When the credit market collapsed, it really changed the way people qualified for loans and their ability to upgrade. In the last two or three years, people chose to repair and fix, and repaired units that may be ten, 15 years old, that aren't very efficient, and they are continuing to do that because they can't get the funds.

Our experience over the last year with some of the policies that the tax credits and things have spurred some of these systems. At the end of the day, they have to keep them running. Again, these are families who have been hurt specifically harder, I think, than most of the economy because they are in manufacturing jobs, two household incomes, and they are doing everything they can to get by. I think this plan with low interest will allow them to do upgrades.

Mr. SINGER. And, Mr. Chairman, I would just add that in terms of the funding for the program, there have been studies conducted. There was a University of California study about a year ago that identified certain barriers to investments in energy efficiency. It is an excellent study, came out about a year ago. And one of them, of course, is the access or the availability of up-front funds to do the work, and that is what this bill goes to.

Another point I would like to make is that some of the energy efficiency programs around the country have had limited success because of the credit limitations that are put on some of the borrowers. I think this program has adequate flexibility to allow these co-ops to determine which of their customers are able to repay these loans, and they can do that by evaluating their payment history for their bills. So it is, I think, an easier program to apply for, in many cases, for low-income folks in our service territory, in particular.

Senator BENNET. I think that is actually a very important point, to. What this bill does is rely on the expertise of our rural co-ops to establish those kinds of questions rather than setting the rules ourselves. I think that is an important step forward.

I wonder, and then I will stop, whether either of you can give us a sense of the kinds of savings that a family that is able to install that new boiler or able to install that new HVAC system would be able to realize as a consequence of this. I assume, Mr. Hanesworth, that is part of how you market what you sell, is you say to people, you are making an investment now, but it is going to pay off in savings later.

Mr. HANESWORTH. Right, Senator. Well, obviously, it depends on the consumer and how they apply the product and the age of the product that they are changing out. But in a typical very high efficient system, they could save up to 40 percent on their heating and cooling bill based on what they chose to put in. Again, a lot of it has to do with the way they operate the system, the insulation,

windows, and things in their house. But there are some significant savings that go along with this, would more than probably offset the monthly payment on an electric bill.

Mr. SINGER. I would just echo that that is one of the conditions of the program, in fact, that the co-op identify that those savings can be made. It is difficult to precisely quantify how much, but hopefully, you are looking at in the magnitude of hundreds of dollars, which will enable folks to repay these loans and still be saving. So it is going to be a case-by-case analysis, but the bill is premised on the fact that those technologies are cost effective and the loans won't be made unless they are.

Senator BENNET. Thank you.

Senator Lugar, I want to thank you for coming and staying. Do you have questions for the panel?

Senator LUGAR. I would just like to follow through on your question, Mr. Chairman. Just as a practical matter, you have mentioned a water heater might be replaced and windows might be replaced. I want to get your view as to really, as a homeowner looks at his or her home, do you have sort of a list of things that might be looked at?

I ask it from this standpoint. A lot of people read generally about energy savings but are not necessarily sophisticated enough to understand specifically what items in the house, or one by one, you might take up. Would co-ops have, let us say, an inventory or a list of suggestions for this?

What I fear is that even though the program might be out there, unless there is considerable publicity about this and suggestions to individual families as to how this might be important, still taking on a loan or a responsibility, or getting involved with an analysis of your light bills and so forth may be daunting to many persons who may sort of remain back there as opposed to stepping forward. What kind of literature or lists or what have you might be available?

Mr. SINGER. Senator, to your question, it is a great point. You are exactly right. If there is not an adequate communication program by the co-op, then the program won't succeed. There has got to be an adequate communication program. I think that is one of the hallmarks of the co-op program, though, is that our utilities have a unique relationship with our customers.

All our co-ops have webpages today. You can go on just about any co-op webpage and it will list all of the things you can do to save money on your energy bill. Similarly, I am sure that is a methodology that would be used to advertise how this program works. And, in fact, the bill requires that the co-op develop what is the list of technologies, what are the steps you could take to reduce your energy costs. So I think the bill recognizes the point you are making.

Mr. HANESWORTH. I might dovetail on that, also, Senator. We develop a lot of tools for consumers. One of those is when a consumer is ready to make a decision on an air conditioning, heating system, or water heater, we have programs that allow them to go in and take information about their home and they can actually project what their savings are. Some people can't overbuy and it helps them really direct what they are capable of spending and dem-

onstrates to them what they might save over the period of a lifetime.

So there are a lot of tools there that help them make decisions and I am sure that the co-ops are using those tools to help those consumers make good decisions about their purchase.

Senator LUGAR. Let me ask how much money a co-op might be prepared to loan to a specific consumer. Let us say that a consumer is really stimulated by all of this, so the consumer says, well, I am going to fix simultaneously my air conditioning, my water heater, my windows, the whole lot. And so this now is up to a sizeable loan. The co-op determines that each one of these investment is going to have an excellent return which meets the requirements of the program, but is a measurement on the basis of the total income of the consumer, the value of the property, or how do you determine the extent of the loan?

Mr. SINGER. I think that the analysis that we have done shows typical loan amounts of perhaps \$1,500 to \$5,000 or \$6,000 or \$7,000. I think what you are describing perhaps might exceed that, if someone wanted to retrofit many systems in their home. I do think the bill allows sufficient flexibility for a co-op to manage the loan program in the way it sees fit. So I think there is a range that would be typical. I suppose on a case-by-case basis, there might be a higher amount loaned.

Senator LUGAR. But the co-op would make its judgment on the basis of knowledge of this homeowner and potential net worth or supposed ability to repay?

Mr. SINGER. And the audit that they would conduct to determine which of those technologies is, in fact, cost effective. It may be that not all of them are and they would tell the consumer, no, you can't do that part of your project, but you can do these other parts. So it is a relationship between the co-op and their customer.

Senator LUGAR. And I think as the hearing has displayed, there really is no arbitrary limit on this, that this is really left to the judgment of the co-op—

Mr. SINGER. That is correct.

Senator LUGAR. —as opposed to the language in the bill, which is probably important, too, that arbitrarily it has not been cut off.

Mr. SINGER. Correct.

Senator LUGAR. Finally, I would just ask, what kind of reception have you experienced either as a manufacturer of the material or as a co-op up to this point with potential consumers? Is this something that has attracted their interest, or is this something that is enthusiasm of members of the Senate and our witnesses today in which we try to project this? I am not denigrating it. That may be important, that somehow or other we become more vitalized in America to save energy. But I am just curious what sort of possibilities you see out there now.

Mr. SINGER. From the co-op perspective, I think there is a great amount of interest, I know in Colorado, with consumers in finding ways to be more energy efficient, both from a pure cost standpoint and from the standpoint that folks understand, I think these days, what the implications are for having to build more power supply to the environment. And many, many customers in Colorado want to invest in these kinds of programs for both of those reasons.

So I believe that they have shown a great interest in the past in existing programs, and with this kind of a new program that I think is going to be more widely available, I think that they will take advantage of it very quickly.

Mr. HANESWORTH. And I would agree with that. I think the interest demonstrated by the tax incentives that were put out in the last 18 to 24 months, we saw a significant shift to energy efficiency equipment in our portfolio of products. Again, one of the limitations was based on the ability to qualify for loans, so they chose to repair versus replace.

The interest grows every year. In fact, as a manufacturer, and most manufacturers are running incentive programs on their own where they will pay up to \$1,200 of their own money in rebates and things to go on top of low interest and go on top of the tax incentives to generate high efficiency sales. So it is growing demand. People are more and more aware. And clearly, it is the way people want to move going forward.

Senator LUGAR. Thank you very much.

Senator BENNET. Thank you, Senator Lugar.

I have just one last question. We focused very much on savings in this discussion and in the energy conservation. There is also the real possibility that these improvements would actually enhance the value of homes, as well, isn't there, in rural communities?

Mr. SINGER. Yes. I think that is clearly true, that if a consumer who invests in one of these projects decides to sell their property and they have got a well-insulated home that has the newest, most efficient heating and cooling technologies, certainly you are correct. That is going to be a selling point if they decide to move and sell that property.

Senator BENNET. Well, I would like to thank all of the witnesses on all of the panels. Thank you, Senator Lugar, for being here today and for all your testimony before the committee and for working together to bring real energy savings to rural Americans nationwide.

I would also like to say a final thank you to Chairman Lincoln and her staff for their assistance in putting this hearing together today. It is a real testament to the support that this bill has that Chairman Lincoln was here and we deeply appreciate her taking the time to be here.

With that, the hearing of the Senate Agriculture Committee's Subcommittee on Energy, Science, and Technology is adjourned.

[Whereupon, at 10:28 a.m., the subcommittee was adjourned.]

APPENDIX

JUNE 17, 2010

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL DEVELOPMENT

STATEMENT OF NIVIN ELGOHARY
ACTING ASSISTANT ADMINISTRATOR
RURAL UTILITIES SERVICE
ELECTRIC PROGRAM

BEFORE THE SENATE AGRICULTURE SUBCOMMITTEE ON
ENERGY, SCIENCE, AND TECHNOLOGY

JUNE 17, 2010

Mr. Chairman, Ranking Member Thune, and Members of the Committee, thank you for inviting me to discuss energy efficiency solutions through the United States Department of Agriculture Rural Development Electric Program administered by the Rural Utilities Service.

The Rural Utilities Service (RUS), one of three agencies within USDA's Rural Development Mission Area, assists rural communities in providing essential electric, telecommunications, and water infrastructure. Today's RUS Electric Program is the successor to the Rural Electrification Administration, established in 1935. The RUS Electric Program portfolio has over 650 borrowers with an outstanding balance of over \$42 billion. It has performed in exemplary fashion, with a delinquency rate of less than one half of one percent. RUS loan funds may be used to finance the construction

and operation of generating plants, electric transmission and distribution lines or systems for furnishing or improving electric service. The RUS is also authorized to make loans to implement demand side management and energy conservation programs, both on-grid and off-grid.

Section 6101 of the 2008 Farm Bill amended Sections 2 and 4 of the Rural Electrification Act to explicitly authorize loans to electric borrowers to implement energy efficiency programs. These amendments codified a long-standing USDA policy. USDA now is developing regulations to implement an effective energy efficiency program. Our goal is to provide borrowers an opportunity to submit loans for energy efficiency programs. The new regulations now under development will establish the rules that apply to this type of investment.

RUS also has decades of experience in funding energy efficiency. Our borrowers have had an option to offer energy efficiency and conservation programs via the Energy Resource Conservation (ERC) program. The law authorized the Secretary to permit the extension of loan principal or interest for up to 5 years. The regulation extends the authority to allow borrowers a deferment of principal, re-amortized over 7 years, to make funds available

for caulking, weather-stripping, heat pumps systems, water heaters, central heating and air conditioning system replacements, ceiling/flooring/duct insulation, and storm and thermal windows.

Under the ERC program, there have been 43 agreements with approximately \$64 million deferred since the first agreement in 1981. Although this program has long been available for energy efficiency efforts, the pool of loans eligible for deferments is declining.

The 2008 Farm Bill also amended Section 12 of the Rural Electrification Act to allow deferment of principal and interest, rather than just principal, for the purposes of energy efficiency, improved energy efficiency and demand reductions, and energy audits.

S. 3102 is an energy savings loan program for rural areas. It provides for a \$4.9 billion loan level available, assuming a cost of \$755 million for 5 years or until the funds are fully obligated. We are uncertain whether or not this is a realistic assumption. An additional \$238 million is authorized for grants, technical assistance, and administrative expenses for RUS to implement the program. Individual co-ops or state-based groups of co-ops

apply for a loan to fund energy efficiency programs for their members. This program would allow the RUS borrower to re-lend the funds to their consumers for energy efficiency measures. These measures include projects such as sealing, insulation, HVAC systems, boilers, roofs and other structural improvements and investments that the utility has demonstrated to RUS will produce sufficient savings. Energy efficient appliances are not eligible for this program.

Under S. 3102, RUS will receive and review the borrowers' energy efficiency plan. The plan must include: the type of energy efficiency measures, the savings associated with the measures, and how they will implement the plan. Trained auditors and contractors will conduct individual consumer energy audits to determine what sorts of energy efficiency improvements are warranted. The loan will be supported by the implementation plan and will include a system-wide energy savings.

The RUS borrower will receive a zero-interest loan to provide low-interest consumer loans to its members. The consumer loans will carry an interest rate no higher than 3%. The reason for this limited interest costs

above zero is to fund a loan loss reserve and offset personnel and program implementation costs. Typical consumer loans may be \$1,500 to \$7,000.

The consumer's energy savings will be reflected on the electricity bills. The savings reflected on the bill assume the project will pay back the energy efficiency measures within a 10 year period. The goal of these loans is for the energy savings from the upgrade to cover most, if not all, of the cost of the loan. If successful, consumers will potentially continue to save on their energy bills after the loan is repaid. RUS would use its existing procedures to approve loans and to advance funds. In accordance with current practice in RUS Electric programs, no loan funds would be advanced on approved loans until the utility borrower submits documentation of work completed for the approved purposes of this program.

S. 3102 also identifies a "jumpstart" grant, not to exceed 4% of the loan, to the RUS borrower to begin the process. The grant funds may be used to defray the costs of implementing the re-lending program. The borrower may use these funds to pay contractors and/or procure equipment and labor.

S. 3102 also identifies a \$2 million grant to provide utility auditors with information about how to implement the measurement and verification of savings, how to establish contractual relations with efficiency upgrade contractors and how to assist consumers in whose homes and businesses upgrades are being made. It would, for example, allow RUS to offer zero-interest loans for up to 10 years to current borrowers to fund energy efficiency measures for their consumers. If S. 3102 were enacted the energy efficiency efforts for this rural energy savings program would fit within the authority of the RUS. The definition of eligible entity in the proposed legislation would include all previous or current RUS borrowers, or a subsidiary or affiliate of a previous or current RUS borrower.

The repayment period of 10 years on the zero-interest loan would be a deviation from our existing law that requires the loan term to match the useful life of the asset. As a result, the legislation contemplates a net cost that is substantially higher than our existing programs, which currently operate on a zero subsidy model.

Although existing RUS regulations provide strong protection against fraud, it is important to ensure either in statute or implementing regulations

that borrowers under S. 3102 maintain strong internal controls and adequate monitoring. The success of this program will hinge on this. Finally, the legislation limits the amount of funds that a borrower can advance during a single year to 50 percent of the loan amount. Currently, RUS borrowers request loan funds on a reimbursement basis with verification of completed work orders. This reimbursement provision is generally considered more advantageous for the lender—in this case, RUS—than those which advance funds.

RUS currently reviews and approves borrower's load forecasts. The load forecasts use economic modeling to capture expected load reductions from energy efficiency programs, energy conservation and load management programs. The cooperative segment of the electric industry has been a nationally recognized leader in energy efficiency and demand side management practices. Such practices reduce demand and help mitigate the need for new electric generation capacity.

RUS has also been instrumental in financing a popular and successful effort to install geo-thermal ground loop systems replacing inefficient heating and air conditioning systems. The upfront cost of these systems can

be prohibitively expensive for many homeowners, but with the assistance of the ERC program, the cost to the home owner can be reduced to affordable levels.

Recently, for example, two cooperatives in Alabama and Kentucky and the Hawaii Habitat for Humanity Office were awarded High Energy Cost Grants, administered by the Electric Program, to assist low income homeowners to install energy efficiency measures to reduce their energy bills. A previous grant to the Alabama cooperative proposes to assist 100 very low income home owners repair or replace duct work, install energy efficient appliances, replace inefficient furnaces and central air conditioners with highly efficient heat and cooling pumps, install insulation and energy efficient doors and windows. These efforts reduce not only the energy bills of the home owner, but also the amount of energy the cooperative has to purchase to serve those homes. One example shows the home owner monthly electric bill decreasing from 3,979 kwh per month to 2,080 kwh per month, a 48 percent reduction.

S. 3102 would require RUS to contract for services to provide program measurement and verification, in addition to training and technical

assistance to implement and deliver consumer energy efficiency projects. The legislation provides funding for additional staff and program expenses to manage the energy efficiency efforts. RUS is reviewing these provisions to determine their impact on our current program.

Mr. Chairman, thank you for the opportunity to testify to provide details on the impact S. 3102 would have on the RUS programs. I would be pleased to answer any questions the members of the subcommittee have.

Testimony of William C. Hanesworth
June 17, 2010

TESTIMONY OF WILLIAM C. HANESWORTH
VICE PRESIDENT, GENERAL MANAGER

AIR CONDITIONING DIVISION, RHEEM MANUFACTURING COMPANY

BEFORE THE SENATE COMMITTEE ON AGRICULTURE
SUBCOMMITTEE ON ENERGY, SCIENCE AND TECHNOLOGY

TESTIMONY ON S. 3102, RURAL ENERGY SAVINGS PROGRAM ACT

JUNE 17, 2010

Chairman Bennet, Ranking Member Thune, and Members of the Subcommittee, I would like to thank you for the opportunity to speak with you today about S. 3102, the Rural Energy Savings Program Act.

My name is Bill Hanesworth, and I am the Vice President and General Manager of the Air Conditioning Division of Rheem Manufacturing Company (Rheem). Rheem is a leading global producer of heating, cooling and water heating products.

On behalf of all of us at Rheem and the Air Conditioning Division, in particular, which I head, thank you for this Committee's leadership in advancing this important piece of legislation. I especially wish to acknowledge Chairman Lincoln for her work and support of us in Arkansas where my office, is located. I serve in Rheem's Fort Smith plant. The facility was completed in 1970, covers 863,506 square feet (the equivalent of 19.8 acres under roof), and is home to more than 1,300 employees. It is where Rheem designs its gas furnaces, advanced electronics and controls, and geothermal and electric heat pumps. Also, it is where Rheem designs and manufactures its residential and commercial heating and cooling systems. The important legislative proposal known as The Rural Energy Savings Program would help support demand for the work of our Fort Smith team – enabling our dedicated employees to continue to design and build products to compete in a global marketplace.

The Fort Smith plant is also home to Rheem's Advanced Research and Design Center, where the design work, testing, and quality analysis is conducted for our heating and air conditioning equipment, as well as some of our water heating and pool equipment. We have a lot going on in Arkansas. Our research and design (R&D) labs utilize controlled ambient rooms, airflow wind tunnels, furnace and combustion test facilities, and environmental simulation rooms to test for life cycle reliability, vibration and shipping, sound, electronics and controls, and instrument calibration. The team doing this work is highly trained and talented. Rheem's R&D team has advanced experience and technical capability. The Senior R&D staff average over 30 years of experience, many with post graduate degrees such as Master's degrees in Science and PhD's in Engineering.

Testimony of William C. Hanesworth
June 17, 2010

Rheem was established in the mid-1920s when brothers Richard and Donald Rheem acquired a galvanizing plant in San Francisco, California. The company began manufacturing water heaters in the 1930s and reached coast to coast distribution of its water heaters by 1936. Rheem increased its product line to include space heating units for homes, oil furnaces, and air conditioners during the 1940s and 1950s. In 1959, Rheem acquired Ruud Manufacturing Company, a pioneer in the water heating industry and the manufacturer of a well-regarded product line with a distribution network throughout North America. In the following years, Rheem entered the heating and air conditioning market, and the company expanded in the late 1960s and 1970s with the rapid growth of the central air conditioning industry. In 1985, the company acquired Raypak, a leading producer of copper tube boilers used for swimming pool heating and commercial hot water supply and hydronic heating. Since then, Rheem has become a global market participant.

Rheem is a significant employer in the United States. The company's headquarters and corporate offices are located in Atlanta, Georgia. As I mentioned, the Air Conditioning Division is located in Fort Smith, Arkansas. Additional Rheem facilities are located in McDonough, Georgia; Montgomery, Alabama; Oxnard, California; Acadia, Florida; Eagan, Minnesota; Randleman, North Carolina; and Lewisville, Texas. Rheem also has an international presence in such locations as Australia, Canada, and Mexico.

Today, Rheem is a leading global producer of water heaters, central warm air furnaces and air conditioners, and swimming pool heaters and commercial boilers. The company is an engaged market player with a broad portfolio of products important to the public and our national energy efficiency goals. The range and variety of Rheem's product line offerings makes the company a one-stop provider for all heating, cooling and water heating solutions. Rheem is the only company with product offerings covering residential and commercial heating, cooling, conventional storage-style water heaters, tankless water heaters, solar water heating systems, geothermal heat pumps, non-metallic water heaters, replacement parts and accessories for all categories.

The company has consistently demonstrated a commitment to innovation and efficiency with its product offerings, and industry groups have lauded and recognized this commitment in recent years. Rheem's Air Conditioning Division was the first to adapt scroll compressor technology to its entire line of air conditioning products, providing superior performance, efficiency and reliability. The Rheem Passive Solar System Series received the 2009 MVP Award for Innovation and Efficiency from the Builder's Group, and the California-based Valley Electric Association awarded the company a 5,000 unit project for this solar technology. Rheem led the water heating industry in the development of Flammable Vapor Ignition Resistance (FVIR) technology, and in fact Rheem is the only manufacturer that exceeds existing standards requirements in this area. Rheem's heat pump water heater is the first integrated heat pump water heater to qualify for Energy Star, and the heater has received numerous awards and recognition: Green

Testimony of William C. Hanesworth
June 17, 2010

Builder Top 50 Best Products Award, Architectural Record – Top 10 Green Product, Contractor magazine Editor’s Pick, Green Build Expo Award – Best Products Winner, and Builder News – Best Product 2009 Winner. Rheem’s non-metallic Marathon water heater, manufactured in the company’s Eagan, Minnesota facility, is the only product of its kind with its lifetime tank warranty.

Because of Rheem’s demonstrated commitment to energy efficiency, the company is very interested in legislation and government programs which incentivize or facilitate the reduction of energy costs and increase the demand for and availability of energy efficient products. Government incentives that encourage investment in home energy efficiency are powerful tools to help support the American consumer and the industries that supply them. The Rural Energy Savings Program Act in particular is critically important to energy efficiency efforts because it lowers the cost barrier faced by consumers interested in investing in energy efficiency.

This important initiative would create jobs at a critical point in our economic recovery while at the same time providing direct and immediate benefits to consumers. Specifically, the domestic manufacturing and construction industries would benefit greatly as energy efficient products are manufactured and, as you know, installation jobs cannot be outsourced. Further, manufacturers of energy efficient products would realize increased demand and increased volume of sales, and others would have yet another incentive to enter the market of energy efficient products. In the words of Subcommittee Chairman Bennet, “[t]his bill will help rural economies recover by creating thousands of good-paying jobs in Colorado, and across the country.”

Consumers would also benefit as they would be able to afford to invest in products that would reduce their costs, increase their energy efficiency, and improve their quality of life at home or in the workplace. In the words of the sponsor of this legislation, Senator Jeff Merkley, “[f]or our rural communities to recover and thrive in the wake of the economic crisis, we need to put people back to work and lower families expenses, and the Rural Energy Savings Program does both.” Similarly, the lead co-sponsor, Senator Lindsey Graham, described the bill as “a plan that will help consumers, particularly those in rural areas of our state and nation, become more energy efficient and lower their electricity costs.” We could not agree more, and we strongly urge Congress to move forward and establish the Rural Energy Savings Program.

As you know, under the proposed legislation, individual co-ops or state-based groups of co-ops will apply to the Rural Utilities Service (RUS) of the US Department of Agriculture (USDA) to borrow money to fund local energy efficiency programs that meet RUS energy savings standards. Co-ops, in turn, will use the funding to make low-interest micro-loans available to residences or small business that choose to participate in the voluntary program and that have a demonstrated ability to repay the loans. Participating consumers repay the co-ops for the installation and material costs through a charge on their utility bills within a 5-10 year window. Energy savings from the upgrade will cover

Testimony of William C. Hanesworth
June 17, 2010

most, if not all, of the cost of the loan, and consumers will save hundreds of dollars annually once the loan is repaid.

The program builds on an existing co-op infrastructure that has strong community ties, an established presence in the industry, and a demonstrated history of repayment of loans. The Rural Energy Savings Program presents little risk to taxpayers and the federal government because the co-ops will assume the responsibility of collecting from consumers. Co-ops currently borrow extensively from the federal government to finance electric distribution, generation and transmission investments and have a proven track record of repaying government loans.

Rheem has significant experience working with co-ops to offer its energy efficient products to consumers. The company's nonmetallic Marathon water heater, in particular, is a popular product with co-ops. The product, manufactured in the company's Eagan, Minnesota facility, is a one-of-a-kind electric water heater offered in sizes ranging from 15 gallons to 105 gallons (see the picture below).



The Marathon heater comes in models with an efficiency rating ranging from 92 percent EF to just under 95 percent EF, and the company plans to offer models with efficient ratings of 95 percent EF and above within the next year. The Marathon heater uses Envirofoam insulation to keep water hot for longer than other water heaters, and the Marathon's blow-molded, polybutylene tank and tough polyethylene outer jacket will not rust, leak or corrode. The Lifetime Tank Warranty saves consumers the future expense of buying and installing a replacement heater. Rheem has learned through experience, however, that consumers often cannot afford the initial up-front cost of higher efficiency products, regardless of eventual cost savings. The availability of low-

Testimony of William C. Hanesworth
June 17, 2010

interest financing through co-ops will allow homeowners and small business to more readily afford cost-reducing and efficiency-increasing products such as the non-metallic Marathon water heater.

The Rural Energy Savings Program will give consumers the option of low-interest financing and the ability to decrease initial costs and realize the cost savings of higher efficiency energy products. Consumers will see long-term energy savings while avoiding the upfront capital and financing costs they would face in the private market, allowing consumers to invest in technology that will save consumers hundreds of dollars each year in energy costs. The cost savings eventually realized on energy bills will allow low income households to allocate funds to food, shelter, education, and other necessities and will allow small business to focus their savings on other areas of need. Beyond utility cost savings, the American public will be working for more successful businesses and living in homes that are better insulated, more efficient, and more comfortable.

The impact of the Rural Energy Savings Program extends well beyond the players in the market for energy efficient products and helps advance national policies that will benefit the country as a whole. Improving energy efficiency will reduce our national carbon footprint and will help decrease our dependency on foreign energy sources. The program will create jobs at home at a critical time for our economic recovery and our efforts to lower unemployment rates. The fact that this bill would advance such important national policies while at the same time providing direct and immediate benefits to consumers and manufacturers explains why Senator Merkley, Senator Graham, and others have worked so diligently to advance this legislation.

For nearly 200 years, the Committee on Agriculture has established agricultural policy for America and tackled vitally important energy issues including renewables, rural development, conservation, and related jobs efforts. The need to lower cost barriers for those in rural communities to use energy efficient products is yet another key issue. Under the leadership of you Chairman Bennet and Ranking Member Thune, and Members of the Subcommittee, this body has the opportunity through the Rural Energy Savings Program Act to extend its long-standing efforts to create jobs, reduce consumer costs, spur domestic production, and reduce our energy footprint. Moreover, the program will achieve all these results by prudently using federal resources to lower cost barriers and empower co-ops and consumers to help themselves and our country. Rheem strongly urges you to move quickly to pass the legislation establishing this program. I thank you for your time and for the opportunity to testify before you today, and I welcome any questions you may have at this time.

Thank you.

Kent Singer
Executive Director
Colorado Rural Electric Association
Denver, Colorado

Testimony of CREA to the United States Senate
Committee on Agriculture
Subcommittee on Energy, Science, and Technology

Hearing on S. 3102, the Rural Energy Savings Program Act
Thursday, June 17, 2010

It is an honor to appear before the Senate Agriculture Committee this morning and I thank you for inviting me to provide the views of Colorado's electric cooperatives on S. 3102, the Rural Energy Savings Program Act.

The Colorado Rural Electric Association (CREA) is a non-profit trade association that represents the interests of Colorado's 22 electric distribution cooperatives as well as Tri-State Generation and Transmission Association. Tri-State supplies power to 18 of Colorado's electric co-ops while the remaining four co-ops receive their power supply from Xcel Energy.

Colorado's electric cooperatives provide electric service to approximately 75% of the land area of Colorado and approximately 25% of all electricity consumers in Colorado. Colorado's electric cooperatives average about seven customers per mile of line, and they serve some of the most economically challenged communities in Colorado. Many of the Colorado co-ops also serve territory that is some of the most challenging in the United States in terms of terrain and weather conditions.

Electric cooperatives have a straightforward mission: to provide reliable electric service at the lowest cost possible. Electric co-ops are non-profit, member-owned utilities. Electric co-ops were created not to make a profit for shareholders, but to provide affordable and reliable electricity.

In that spirit, Colorado's electric co-ops have for many years provided information and advice to their member-owners to help them manage their energy bills. This includes programs and incentives for their member-owners to use electricity in an efficient and cost-effective manner. These programs include rebates for energy-efficient appliances, time of day rates to encourage off-peak usage, and in some cases loans for energy efficiency improvements. Colorado's electric co-ops supported the Colorado net metering law which allows co-op customers to offset their electricity consumption with their own generation from renewable resources.

CREA believes that the Rural Energy Savings Program Act is another tool that electric co-ops can use to enable their member-owners to maximize energy efficiency. The RESPA authorizes an "on-bill financing" mechanism that allows co-op members to borrow money from the co-op for energy efficiency improvements at their homes and businesses and to pay back those loans through their monthly electric bills.

The RESPA program is a model of simplicity: Co-ops would be authorized to borrow no-interest funds from the federal government (acting through the Rural Utilities Service) and in turn make low-interest loans to their residential or business consumers for the sole purpose of improving the energy efficiencies of those residences or businesses. No loan funds would be approved until an energy audit is performed by the co-op, an application for funds is approved by the RUS, and the project is completed in accordance with the plans contained in the application.

The RESPA requires that energy efficiency loans must have a payback period of no more than ten years. This means that the savings to customers related to the energy efficiency improvement projects must be more than the amount of the loan and that customers will be able to repay the loan from those monthly savings in their energy bill. This rule means that energy efficiency projects that are not cost effective within a ten-year period will not be funded, and such a limitation will put market pressure on some technologies to bring costs down.

The RESPA is designed to minimize the impact on the federal budget because it is primarily a loan program, not a grant program, and it requires repayment of loans to the federal government. The program does have a small grant component that enables co-ops to receive up to 4% of the loan amount in order to offset the upfront costs of initiating the program.

The RESPA program will use the existing infrastructure at the RUS and the RUS loan protocols to evaluate loan applications, obligate funds and advance them to electric co-ops. The co-ops already have the billing capabilities and consumer relationships that will enable them to deliver and administer the loans to their consumers.

The loan funds provided by the government will not cover the entire costs of the program because the individual co-ops will incur costs to administer the program. The program is voluntary, however, and individual co-ops will have to determine whether there is a need in their community that could be addressed with funds from the RESPA loan program.

It is important to remember that the co-ops are ultimately responsible for paying back the loans from the RUS and not the individual customers. They therefore have a strong incentive to make careful evaluations of potential projects to make sure that

their member-owners get the value they expect and that they have the ability to repay the loan from the co-op.

CREA supports the RESPA bill because we believe there are co-op members in Colorado that would benefit from energy efficiency improvements on their homes and who cannot afford to make the upfront investment in those improvements. The average initial cost of energy efficiency upgrades has deterred many co-op customers from making much-needed energy efficiency investments. By providing low-interest loan funds, the RESPA would benefit rural Colorado by making homes and businesses more comfortable and energy efficient, and it would also create much-needed jobs in rural communities.

I thank you for the opportunity to speak to you this morning and would be glad to address any questions you might have.

