USDA United States Department of Agriculture

Rural Development

Presented by
Patrick J Bormann
General Field Representative
USDA Rural Development
Electric Program

The RUS Electric Program

Alternative Energy and Energy Efficiency Initiative Financing

A Record of Accomplishment - A Vision of the Future

A record of accomplishment…..the Rural Utilities Service Story……

History

The RUS of today evolved from the Rural Electrification Administration (REA) formed as part of the Federal government's "New Deal" programs during the Great Depression, designed to help the neediest in America…

REA History, continued….

1935 – May 11, Rural Electrification Administration was created by Executive Order 7037 and the REA was born

REA's mission was to:

"initiate, formulate, administer and supervise a program of approved projects with respect to the generation, transmission and distribution of electric energy in rural areas"

RUS Partnership with Local Leaders

- **Community involvement was a key to implementation then, and is still key for all RUS programs**

TODAY'S ELECTRIC PROGRAM PRIORITIES

- **Increase awareness and development of energy efficiency programs**
- **Spur the growth of renewable energy**
- **Promote smart grid initiatives**
- **Be responsive to carbon rule (EPA Plan) impacts on our borrowers and on our portfolio**
- **Increase the flow of capital into rural markets**

Our Program in the year 2016:

- Policy, Planning and Finance – technical assistance and leadership
- Generation, Transmission & Distribution - financing
- Energy Efficiency, Conservation (EECLP) – “pass through” loan assistance
- New Rural Energy Savings Program Act (RESPA) – 0% interest rate program to be rolled out soon
- Renewables – project or system financing
- Non-profit Lender Portfolio Guarantees ($750 million) – lending to other industry lenders
- High Energy Cost Grants ($10 million) – a targeted program to reduce very high electric costs

RUS Electric Program – 2016, “by the numbers”:

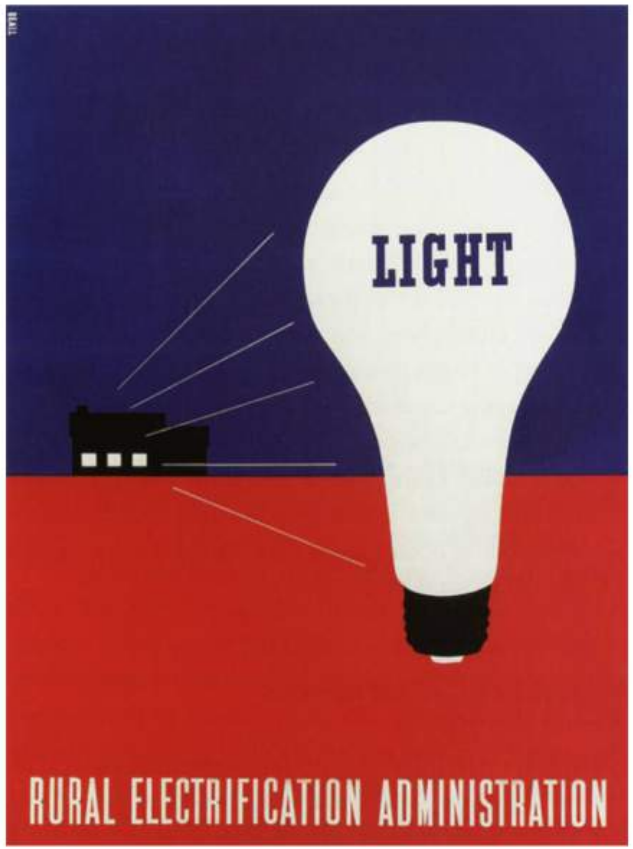
- $3.4 billion of investment for FY 15
- 107 new Loan commitments made
- $6.25 billion authorized for FY 16
- $6.5 billion requested for FY 17
- At or near Treasury rates
- Incentive lender, not lender of last resort – continue “first in, first out” processing
- Generation, transmission, distribution, EE, conservation, smart grid & smart home

A Record of Accomplishment

- $46 billion loan portfolio
- Almost 600 current borrowers
- $120 billion total investment since inception of program
- 0.04% delinquency rate
- Over 40% of the electric infrastructure in the USA built by entities currently or once financed by RUS/REA

Vision of the Future

- Cleaner
- Greener
- Further
- Smarter
- Stronger



Lester Beall, Poster for the Rural Electrification Administration, ca. 1939

Great Interest Rates Continue!

APPROXIMATE FFB QUARTERLY RATES as of March 21, 2016*

3-mo	6-mo	1-yr	2-yr	3-yr	5-yr	7-yr	10-yr	20-yr	30-yr
0.30	0.56	0.69	0.88	1.04	1.37	1.65	1.83	2.14	2.30

*plus 1/8 %

Plentiful Funding Levels for Electric Programs

FY 2015

- **$5.5 Billion** in FFB Guaranteed Loans

- **$500 Million** in 313A Guaranteed Underwriting Loans

A fun fact - Electric Programs operates at a profit ("negative subsidy" in government terms):

- $74,142,940 for fiscal year 2014
- $42,749,395 for this last fiscal year (thru July 15th)
- As of latest update, we are operating with 78 of 103 authorized employees due to retirements and resignations.

Eligible Borrowers reminder

- Eligible borrowers are corporations, states, territories, and subdivisions and agencies thereof, municipalities, people's utility districts, and cooperative, non-profit, limited-dividend or mutual associations that provide retail or power supply service needs in rural areas.

- However (except in Nebraska who has an excellent network of Public Power Districts – PPD's), Electric Cooperative's constitute a majority of our borrowers

    - 591 electric systems borrowers in 46 states

Definition of "Rural"

- The "rural area" definition currently in use by the Electric Program was established by Congress in the 2008 Farm Bill, enacted on June 18, 2008. For the Electric Program, a "rural area" is "any area other than a city, town, or unincorporated area that has a population of greater than 20,000 inhabitants."
- Existing borrower service territories were grandfathered at the time of enactment.
- RUS uses 2010 Census Places as the basis for making it's determinations as to what is rural and urban.
- Census data indicates **93% of places** (cities, towns and census designated places) were under the 20,000 threshold in 2010.

2000 Places	2010 Places	Census Population
1,944	2,098	>20,000
23,431	27,416	<=20,000
25,375	29,514	

RUS Energy Efficiency and Conservation Loan Program (EECLP) is authorized - and we are happy to work with both existing and new program applicants to utilize the program

- from 2008 Farm Bill Electric Programs Provisions
Section 6101: Energy Efficiency Programs

Amended sections 2 and 4 of the RE Act to explicitly authorize loans to electric borrowers to implement energy efficiency programs, codifying long-standing USDA policy and identified energy efficiency as an eligible RUS loan purpose.

Energy Efficiency and Conservation Loans, continued

- The regulation allows new financing opportunities for RUS borrowers to promote energy efficiency and weatherization activities to businesses and homeowners in rural America
  - RUS will advance EE loan funds to utility using FFB program
  - The borrowing utility makes EE loans to members, the "ultimate recipients"
- The borrowing entity (may be a cooperative, muni, or other rural electricity provider) may also use the funds for their own purposes rather than creation of a re-lending program – i.e. energy efficiency updates to their headquarters facilities.

1710.406 Eligible Activities and Investments

- All energy efficiency measures attached to the home/business
- Renewable energy systems
- Demand side management (including smart grid)
- Energy audits
- Consumer Education & Outreach
- Power factor correction equipment on the consumer side of the meter
- Re-lamping to more energy efficient lighting
- Fuel Switching
- Other investments approved by RUS as part of an EE Program

There are 4 steps to obtaining an EECLP Loan:

1. Prepare a written EE Program consistent with RUS Guidelines.
2. Submit and obtain RUS approval of the EE Program.
3. Develop an Energy Efficiency Work Plan (EEWP) .
4. Prepare/submit an EECLP loan application to RUS.

To Obtain Approval from RUS, Your EE Program should:

1. Incorporate a Business Plan.
2. Incorporate a Quality Assurance Plan.
3. Be shown to be cost effective
4. Have a positive Net Present Value or, as a minimum, have a neutral impact on the borrower's financial condition.
5. Above all, result in the savings of energy overall or in the overall reduction in energy demand in the service territory.

Energy Efficiency

- 3 units of energy to produce 1 unit of electricity
- EE is one of our most powerful tools to reduce CO2 and other pollutants
- Reduces consumer bills, increases home values, creates jobs, enhances productivity and manages utility loads and costs – Win, Win, Win……
- On bill financing makes repayment convenient, affordable and secure

USDA Rural Development

Committed to the future of rural communities.

Renewable Energy Financing Discussion:

- In the 2008 Farm Bill, Congress added Section 317 to the RE Act to allow us to expand the financing of renewable generation resources.

- Projects need to meet the "**3-Rs**": **Rural** beneficiaries; **Renewable** generation; and **Ready** to be financed and built (commercially proven technology).

Renewable Energy Funding at RUS

- Loans for eligible renewable technologies include:

  Wind, Solar, Biomass, Geothermal, and Hydro

- The technology must be commercially available.

Crow Lake Wind – Basin/East River

Kodiak Electric Hydro

A good example in Iowa:

Communities go solar

BY **DARIN LEACH**

IOWA'S rural landscape has changed dramatically over the years as thousands of giant wind turbines now stand like protective guardians over fields, farms and rural communities. By year-end, Iowa will have enough installed wind energy to generate more than 30% of the electricity used in the state each year.

Iowans, especially in rural parts, have harnessed and converted the sun's solar rays into energy, too.

Western Iowa Power Cooperative (WIPCO), with locations in Denison and Onawa, recently began a community solar program where members can subscribe to panels of large solar array projects built by the cooperative and receive a monthly production credit on their electric bill. Financing for the project was made possible, in part, through a $205,679 USDA Rural Development Rural Energy for America Program (REAP) grant and a $270,000 USDA electric program loan.

"For many years projects assisted through REAP funding have helped rural Iowa farmers and businesses use more renewable energy. Renewable energy has cut carbon pollution and reduced our dependence on foreign oil, saved money on energy bills and created jobs," says Bill Menner, USDA Rural Development state director in Iowa. "All of these are crucial components to developing healthier, more economically vibrant rural communities."

More renewable energy

The array in Denison began capturing solar energy in June and is expected to produce more than 8.7 million kilowatt-hours of energy during the next 25 years.

RIBBON-CUTTING: Officers and members of WIPCO gather to commemorate completion of a solar collector project at Denison earlier this year.

CLEAN AND GREEN: Western Iowa Power Co-op members have secured nearly 600 subscriptions to participate in the community solar program. Members who subscribe to panels on the co-op's large solar arrays receive a monthly production credit on their electric bill.

WIPCO members who participate in the program see a credit on their electric bill based off of monthly production for the life of the 20-year program. They are also able to hedge against future rate increases, as the kilowatt-hour credit amount they receive will increase as rates increase.

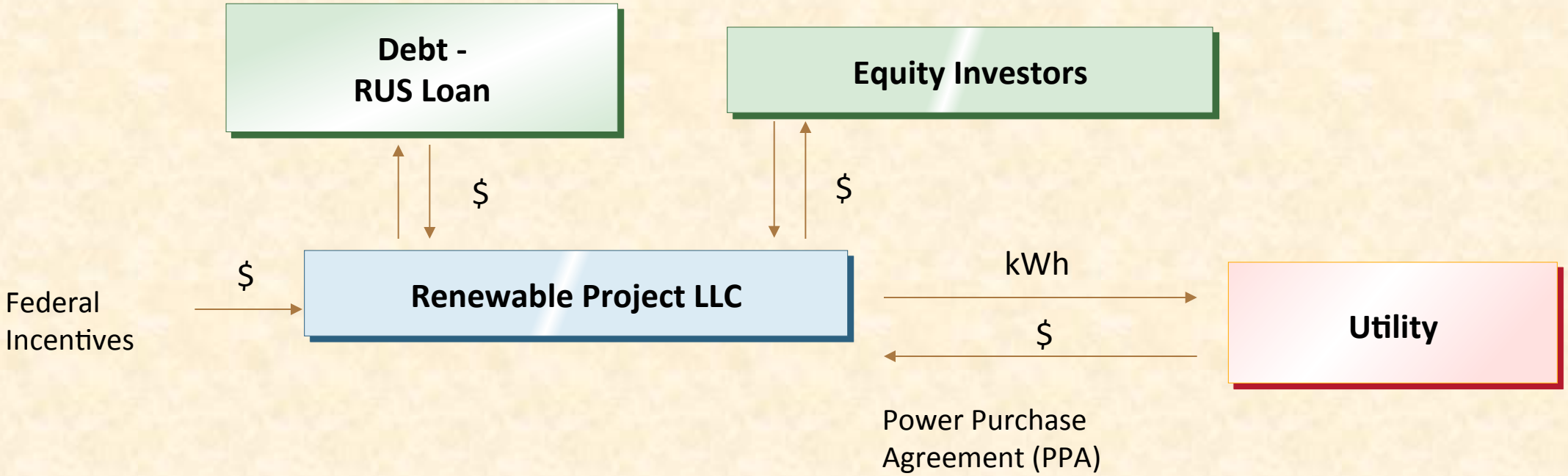
HARNESS THE SUN: The Denison array began capturing solar energy in June and is expected to produce more than 8.7 million kilowatt-hours of energy during the next 25 years.

including biomass, geothermal, hydro power, solar and wind.

Projects that improve a business's energy efficiency, such as insulation, lighting, cooling or refrigeration units, doors and windows, and high-efficiency heating, ventilation and air conditioning systems, are also eligible for REAP funding.

Renewable Project Loans

Sample Project Finance Structure



In closing, things are Easy if You:

Know where to look for solutions

&

Are prepared for the paperwork

Contact Information:

Patrick J. Bormann
General Field Representative | Rural Utilities Service | Electric Program
Rural Development
United States Department of Agriculture
P.O. Box 267, Livermore IA 50558-0267
Phone: 515.379.1002 | Fax: 515.379.1002 | Cell: 515.890.9543
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