USDA United States Department of Agriculture

Rural Development

Rural Utilities Service Update

NARUC Staff Subcommittee on Accounting and Finance

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Chief, Technical Accounting and Auditing Staff

Topics

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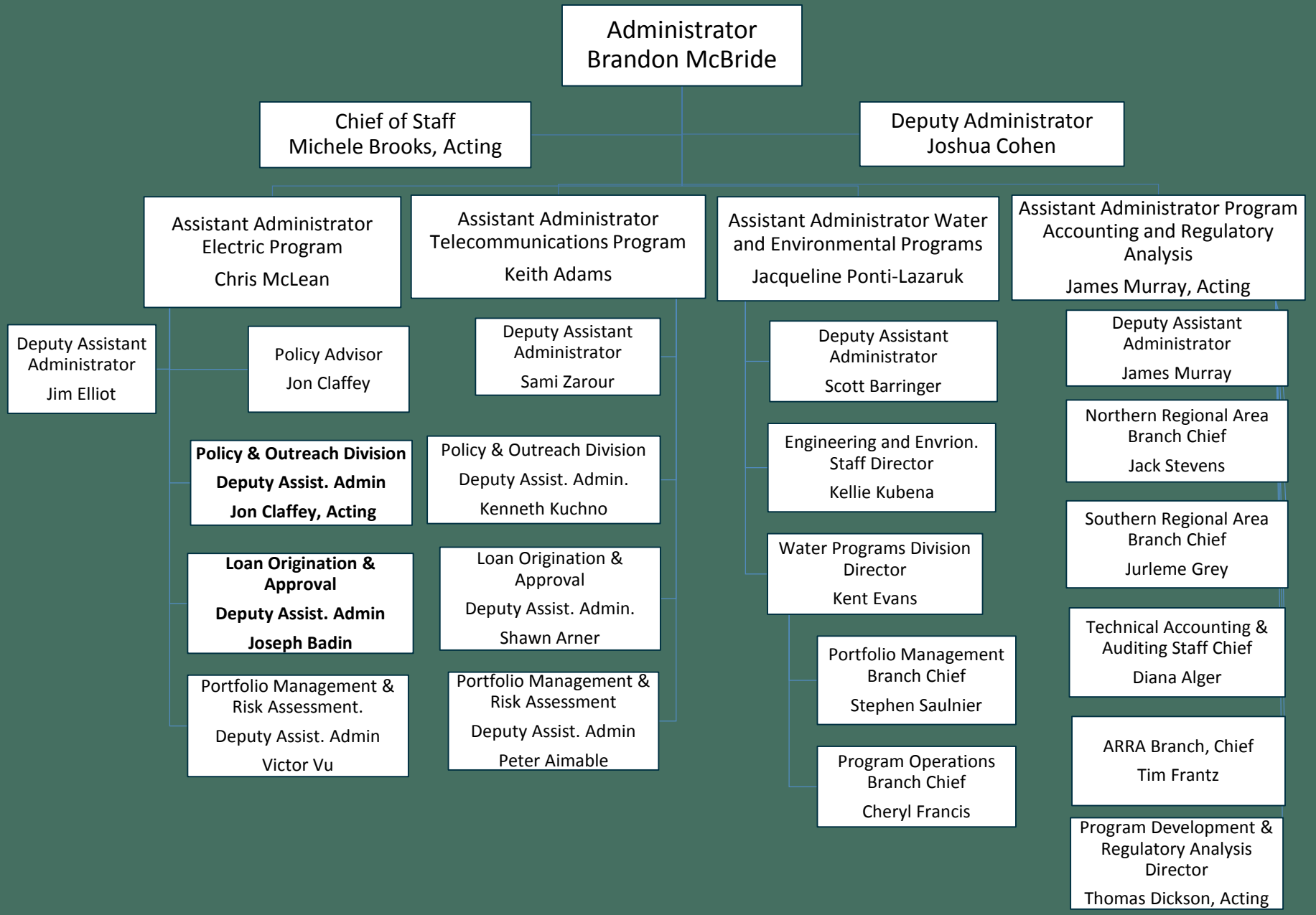
Rural Utilities Service



Rural Development Mission

Rural Development is committed to helping improve the economy and quality of life in rural America.

We offer **loans, grants, and loan guarantees** that support essential services, such as:

- Housing
- Economic Development
- Health Care
- First Responder Services and Equipment
- Water, Electric, and Telecommunications Infrastructure

Rural Development Background

Rural Development divided into three agencies with unique programs and objectives:

- Rural Utilities Service (RUS)
- Rural Housing Service (RHS)
- Rural Business-Cooperative Service (RBS)

Across the three agencies, Rural Development administers over 40 programs.

- RUS Electric and Telecommunications programs are administered out of the National Office
- All RHS and RBS programs and RUS Water program are administered out of the State Office

Electric Program

History of rural electricity

- Urban households and businesses were gaining access to electricity in large numbers after 1910, however even in rural areas which were served, electrical rates in the 1920s were commonly twice as high as urban rates. By 1934, only 11% of farms were electrified.
- Presidential Executive Order 7037 created the Rural Electrification Administration, or REA, on May 11, 1935, funding was appropriated in 1936.
- By the end of 1938, 350 cooperative projects in 45 states were delivering electricity to 1.5 million farms
- By the mid-1950s nearly all American farms had electrical service that was provided through the REA or by other means.
- Monies lent through the REA were largely repaid, as the default rate was less than 1%.

History of rural electricity

- REA engineers developed some of the first specifications for the construction of electric distribution plant
- REA was also instrumental in developing the National Electrical Safety Code (NESC)

RUS Engineering Staff

Electric Programs Engineering

- The Engineering Standards Branch (ESB) within the Office of Policy, Outreach and Standards (OPOS) is responsible for engineering aspects of the Electric Programs' standards, specifications, and other requirements with respect to design, construction, technical operation, maintenance of power plants, distribution and transmission systems and facilities, and asset management practices such as load management, energy efficiency, smart grid and system communications.
- The staff in ESB develops engineering practices, policies, standards, and guidelines relating to electric borrowers systems; conducts analyses and provides guidance on matters relating to fuels for electric generating stations; and develops relevant policies and procedures for the Electric Programs. The staff develops criteria, procedures, and analysis for improvement of the operating performance of electric borrowers and for the forecasting of borrowers' power requirements.

Electric Programs Engineering

The Technical Standards Committee "A", also within OPOS, maintains and publishes a List of Materials with periodic updates:

- List of Materials
- Technical List of Materials
- How to apply for Acceptance
- RUS Materials Requirement Specific Information Sheets
- List of Eligible Countries

FY 2015 Overview

Total loans obligated:	107	$ 3.4B	
FY15 loans (FFB)		105	$ 2.9B
Distribution loans		89	$ 1.9B
Power Supply loans		16	$ 1.0B
Note Guarantees (313A):	2	$ 0.5B	

FY 15 loan purposes:	
New and improved distribution	$1,600.0M
Transmission	$ 484.0M
Smart Grid	$ 134.0M
Renewable projects	$ 71.0M
EECLP	$ 46.0M
High Energy Cost Grants: 9 grantees	$ 7.9M

FY 2016 Boxscores as of August 2016

	#	FFB	#	Guaranteed	#	Total
Allocation		$ 5,500,000,000		$ 750,000,000		$ 6,250,000,000
Obligated	46	$ 1,292,702,000			46	$ 1,292,702,000
Unobligated*		$ 4,207,298,000		$ 750,000,000		$ 4,957,298,000
Applications on Hand	44	$ 2,203,775,000	2	$ 750,000,000	46	$ 2,953,775,000
Expected Surplus of Funds		$ 2,003,523,000		$ -0-		$ 2,003,523,000

* Includes a loan in the amount of $ 6,700,000 approved but not yet obligated as of August 31, 2016.

Energy Efficiency and Conservation Loan Program

EECLP Overview

- Eligible EE programs can be developed and implemented by an eligible borrower for its service territory.
- Eligible investments and activities include; building weatherization, HVAC upgrades, ground source heat pumps, lighting, small scale renewable generation, energy audits, soft costs, etc.
- A typical borrower's energy efficiency program might have the utility relending the funds to the consumer for EE upgrades to homes, businesses or industry.
- Utilities may charge an interest rate to the consumer for the EE loan.

EECLP – Overview *continued*

- Many EE programs feature on-bill repayment directly to the utility.
- RUS will ask potential borrowers for a business plan and quality assurance plan to support the loan application.
- Potential borrowers should reach out to GFRs and/or headquarters personnel for guidance on submitting an application.

Elements of the Business Plan

- **Executive summary**
- **Organizational background**
- **Marketing plan**
- **Operations Plan**
- **Risk Analysis**

Source: 7 CFR 1710.407

EECLP – Eligible Activities and Investments

- Measures to improve energy efficiency and/or reduce peak demand on the customer side of the meter
- Energy efficiency and conservation measures where assets financed at the end user's premises.
  - E.g. Tariff based EE Programs
- Renewable Energy Systems
  - On or Off Grid energy systems;
  - Fuel cells
- Demand side management (DSM) investments
  - Smart Grid Investments

Source: 7 CFR 1710.406

Environmental Review

- RUS has developed a toolkit to streamline the environmental review process for applications authorized under the EECLP

- RUS Environmental Staff
  - Kellie Kubena, Director
    - Email: Kellie.Kubena@wdc.usda.gov
    - (202) 720-1649

Some Activities Covered by the EECLP's PEA

Air Flow Efficiency - Interior - Add/Replace

- Air Destratification
- Airflow and fan speed reduction
- Ductwork system with centrifugal or vane axial fans
- Enclosed high-velocity fan
- Improve design and balance of duct system
- Increase pipe insulation
- Install local ventilation and makeup air hoods
- Open propeller fans
- Reduce Ventilation Loads
- Reduce ventilation rate to minimum
- Variable-air-volume (VAV) system to reduce fan energy use

Cooling System - Interior - Add/Replace

- Improve Cooling Efficiency
- Increase chilled water design temperature
- Increase Condensing Efficiency
- Increase Condensing Unit Efficiency
- Install Double-Bundle Chillers
- Install High-Efficiency Compressor
- Install More Efficient Cooling System
- Install Refrigerated Space Doors or Curtains
- Lower condenser water design temperature
- Multiple Compressors and Controls for Air Conditioning
- Systems
- Optimize cooling tower flow controls
- Parallel unequal reciprocating compressor
- Reciprocating compressor
- Rotary compressor
- Screw compressor
- Use multiple chillers and optimization controls

EECLP – Examples

- USDA awarded a $6 million EECLP loan to North Carolina's Roanoke Electric Membership Corporation to finance improvements to HVAC systems, replace appliances, and build envelope improvements for about 200 residential energy efficiency upgrades per year over the next four years.
- The Roanoke Center oversees efficiency upgrades at no upfront cost to member.
- As part of utility service, the meter / dwelling location is assigned a fixed monthly charge (tariff) to pay off the upgrade investment.
- There is a guaranteed savings associated with any project.
- Previously, customers had said "no" to EE programs because of the loan and associated credit scoring.

EECLP – Examples *continued*

- North Arkansas Electric Cooperative (NAEC) has received and Energy Efficiency and Conservation Loan of $4.6 million.
- NAEC was one of the first coops to offer EE via ERC program in the 1980s.
- NAEC lent out $15 million through the years for member EE upgrades.
- The interest rate to NAEC's consumer is ½% above RUS' interest rate.
- Upgrades include geothermal heat pumps, HVAC, weatherization and lighting.

EECLP – Examples *continued*

- $46M loan to the Vermont Energy Investment Corporation (VEIC) to support energy efficiency and renewable energy improvements in rural areas across the state.
- This is the largest EECLP project in terms of both financing and scale that the USDA's Rural Utilities Service has made since the program's launch in December 2013.

EECLP – Examples *continued*

This loan is expected to provide major benefits to rural Vermont residents, businesses, and communities beyond reducing the burden of energy costs. For example, reducing energy costs for farmers and food manufacturers—including family run dairies and maple syrup producers—can help them remain competitive. Cost-effective and high-quality energy efficiency upgrades will enable families and business to feel more comfortable during Vermont's long heating season and spend less on heating costs.

High Energy Cost Grant Program

High Energy Cost Grants

What does this program do?

- Assists energy providers and other eligible entities in lowering energy costs for families and individuals in areas with extremely high per-household energy costs (275 percent of the national average or higher.)
- 7 CFR 1709

High Energy Cost Grants

Who may apply?

Most retail or power supply providers serving eligible rural areas, including:

- State and local governmental entities
- Federally recognized Tribes and Tribal entities.
- Non-profits, including cooperatives and limited dividend or mutual associations
- For-profit businesses

High Energy Cost Grants

What is an eligible area?

- Eligible areas must demonstrate annual average household energy cost exceeding 275 percent of the national average under benchmarks published in the Notice of Solicitation of Applications.
- Eligible areas must be located in the United States, U.S. Territories, or areas eligible by law to participate in USDA Rural Utilities Service Programs.

High Energy Cost Grants

How may the funds be used?

- To finance the acquisition, construction or improvement of facilities serving eligible communities, including:
- Electric generation, transmission and distribution facilities, including:
  - Equipment, materials and activities
  - Land or right-of-way acquisition, professional expenses, engineering and permitting costs
- Natural gas distribution and storage facilities, including equipment, materials and activities
- Petroleum product storage and handling facilities, including equipment, materials and activities

High Energy Cost Grants

How may the funds be used? (Con't)

- Renewable energy facilities, including solar, wind, hydropower or biomass technologies used for on- or off-grid:
  - electric power generation
  - water or space heating
  - process heating and power
- Backup or emergency power generation or energy storage technology, including generation equipment installed on consumer premises
- Implementation of initiatives such as:
- Energy efficiency improvements and conservation measures (i.e. weatherization of residences and community facilities)
- Programs encouraging the use of energy-saving appliances and devices
- Programs aimed at improving the quality and cost of energy service

High Energy Cost Grants

What is the national average annual home energy cost?

For the purposes of this program, the high energy cost benchmarks effective since publication of the 2015 Notice of Solicitation of Applications:

- Electricity $3,685 ($0.33 per kilowatt hour)
- Natural gas $2,211 ($33.50 per thousand cubic feet)
- Fuel oil $3,680 ($6.68per gallon)
- LPG/propane $2,673 ($5.76 per gallon)
- Total household energy $5,566 ($62.12 per million BTUs)

High Energy Cost Grants

Why does USDA Rural Development do this?

This program helps to offset extremely high household energy costs in areas where local conditions cause energy costs to exceed 275 percent of the national average. This type of assistance increases economic opportunity and the quality of life in rural communities nationwide by maintaining a seamless electric network for all Americans, regardless of where they live.

High Energy Cost Grants

From 2004 to 2016, RUS has advanced:

- $103.4M in grants to 51 separate entities in 15 eligible areas.
- The average award per area is $6.9M with a high of $46.7M and a low of $0.8M
- The average award per entity is just over $2M

Telecommunications Program

Telecommunications Loan Programs

Infrastructure Program

- **FY 2016**
  - $690M available in FY 2016
  - Loans finance new and improved telecommunications infrastructure in rural communities of 5,000 or less
- **FY 2017**
  - Proposed budget of $690M

Farm Bill Broadband Program

- **FY 2016**
  - $20M available in FY 2016
  - Loans finance the costs of constructing a broadband network serving rural communities of 20,000 or less (not located in urbanized area contiguous/adjacent to a community over 50,000)
    - Eligible service areas contain at least 15% unserved areas with no part of the service area overlapping with 3 or more incumbent service providers or a current RUS borrower or grantee (there are certain exceptions)

Telecommunications Loan Programs Updates

Infrastructure Program

- **FY 2015**
  - **17** loans approved: **$245 million**
- **FY 2016**
  - **12** loans approved: **$155 million**
  - **22** loans in process: **$285 million**
- Applications are accepted year round
- Can use RD Apply, but not required <Yet>

Farm Bill Broadband Program

- **FY 2015**
  - New regulation and NOSA were published July 30, 2015
  - Application Window closed on September 30, 2015
    - **15** loans received: **$118 million**
    - **3** loans still in process: **$24 million**
- **FY 2016**
  - Applications were submitted through **RD Apply**
  - Applications **period closed** July 7, 2016
  - **12** loans received: **$94 million**

Telecommunications Loan Programs -- Did You Know?

Standard Loan Terms include:

- 2 Year Principal Deferral
- Interest Rate at the Cost-Of-Money
- Loan Maturity - Life of the Facilities Financed Plus 3 Years

Modified Loan Terms for Serving a Substantially Underserved Trust Area (SUTA) include:

- At the discretion of Administrator, RUS can modify certain loan terms or application requirements, which may include:
  - Interest rates as low as 2%, extended amortization period, and/or priority over projects that do not serve trust areas
- **FY 2015 -- Mescalero Apache Telecommunications (NM) $5.4 million**
- **FY 2016 -- Sacred Wind Communications (NM) $13.8 million**

Staff can assist and review loan applications before submission.

Telecommunications Farm Bill Loan Program -- Did You Know?

Unserved is defined as areas lacking access to Broadband Service of 4 megabytes download / 1 megabyte upload.

- The Agency will publish the minimum transmission capacity that will qualify as broadband service in a notice in the Federal Register and this rate may be different for fixed and mobile broadband service.

Applicant Priority is given to applications demonstrating the greatest proportion of unserved households.

Special Terms and Conditions may apply to applications where over 50% of the households are unserved, which may include:

- up to 4 year principal deferral
- 25% extension to the amortization period of the loan up to 35 years

Telecommunications Grant Programs

Community Connect Program

- **FY 2016**
  - **$11.74M** available in FY 2016
  - Grants cover the costs to construct broadband networks in rural communities of 20,000 or less (not located in urbanized area contiguous/adjacent to a community over 50,000)
- **FY 2017**
  - Proposed budget of **$39M**

Distance Learning and Telemedicine Program

- **FY 2016**
  - **$23.4M** available in FY 2016
  - Grants fund equipment needed to provide Distance Learning and Telemedicine services
- **FY 2017**
  - Proposed budget of **$35M**

Telecommunications Grant Programs Update

Community Connect Program

- **FY 2015**
  - **68** applications submitted**: $106 million**
  - **5** applications approved: **$11 million**
- **FY 2016**
  - Submissions were due June 17, 2016
  - **Over 70** applications received: >**$120 million**
  - As these are reviewed, applicants are being notified of level of completeness or rejection
  - Link: http://www.rd.usda.gov/programs-services/community-connect-grants.

Distance Learning and Telemedicine (DLT) Program

- **FY 2015**
  - **191** applications submitted: **$38 million**
  - **75** applications approved: **$23 million**
- **FY 2016**
  - Submissions were due **March 14, 2016**
  - **182** applications received for **$55 million**
  - **81** applications approved: **$23.4 million**
  - **45** distance learning & **36** telemedicine projects
  - **23 of 81** (28%) include a tribal component
  - Link: http://www.rd.usda.gov/programs-services/distance-learning-telemedicine-grants.

Telecommunications Grant Programs – Did You Know?

Special Consideration provided under both grant programs to projects serving tribal communities.

- 15 additional points in FY 2014 and 2015

Special Consideration provided under both grant programs for tribes, Strikeforce, and Promise Zones.

- 15 additional points in FY 2016

Telecommunications Programs Rural Investments

Since 2009, RUS has invested over $7.1 billion in projects serving rural communities:

Telecom Infrastructure	$2.944 billion
Farm Bill Broadband	$339 million
Community Connect	$77.4 million
Distance Learning and Telemedicine	$235.9 million
Broadband Initiatives Program	$3.5 billion

Distance Learning and Telemedicine Grants

Distance Learning and Telemedicine Grants

What does this program do?

- The Distance Learning and Telemedicine program helps rural communities use the unique capabilities of telecommunications to connect to each other and to the world, overcoming the effects of remoteness and low population density. For example, this program can link teachers and medical service providers in one area to students and patients in another.
- 7 CFR 1703, Subparts D through G

Distance Learning and Telemedicine Grants

Who may apply?

- Eligible applicants include most entities that provide education or health care through telecommunications, including:
- Most State and local governmental entities
- Federally-recognized Tribes
- Non-profits
- For-profit businesses
- Consortia of eligible entities

Distance Learning and Telemedicine Grants

DLT 100% grant applications are accepted through a competitive process. The application window is announced annually (typically after the first of the year) through a Notice of Funds Availability (NOFA) or a Notice of Solicitation of Applications (NOSA) in the *Federal Register*. Applicants are required to provide a minimum 15 % match (cannot be from another federal source). Awards can range from $50,000 to $500,000.

Distance Learning and Telemedicine Grants

How may the funds be used?

- Grant funds may be used for:
- Acquisition of eligible capital assets, such as:
  - Audio, video and interactive video equipment
  - Terminal and data terminal equipment
  - Computer hardware, network components and software
  - Inside wiring and similar infrastructure that further DLT services
- Acquisition of instructional programming that is a capital asset
- Acquisition of technical assistance and instruction for using eligible equipment

Distance Learning and Telemedicine Grants

Why does USDA Rural Development do this?

- The Distance Learning and Telemedicine program helps rural residents tap into the enormous potential of modern telecommunications and the Internet for education and health care, two of the keys to economic and community development.

Community Connect Grants

Community Connect Grants

What does this program do?

- This program helps fund broadband deployment into rural communities where it is not yet economically viable for private sector providers to deliver service.
- 7 CFR 1739, Subpart A

Community Connect Grants

Who may apply?

- Eligible applicants include:
- Most State and local governments
- Federally-recognized Tribes
- Non-profits
- For-profit corporations

Community Connect Grants

What is an eligible area?

- Rural areas that lack any existing broadband speed of at least 4 Mbps downstream and 1 Mbps upstream is eligible.
- The Application Guide provides guidance on rural areas currently eligible for Community Connect Grants
- Use our online Mapping Tool to draw the proposed funded service area. The Mapping Tool also provides information on what counts as rural areas and the existing Rural Utilities Service borrowers and grantees.

Community Connect Grants

How may the funds be used?

- The construction, acquisition, or leasing of facilities, spectrum, land or buildings used to deploy broadband service for:
  - all residential and business customers located within the Proposed Funded Service Area (PFSA)
  - all participating critical community facilities (such as public schools, fire stations, and public libraries)
- The cost of providing broadband service free of charge to the critical community facilities for 2 years
- Less than 10% of the grant amount or up to $150,000 may be used for the improvement, expansion, construction or acquisition of a community center that provides online access to the public

Community Connect Grants

Are there other grant requirements?

- Buildings constructed with grant funds must be located on property owned by the awardee
- Leasing expenses will only be covered through the advance of funds period included in the award documents
- Grantees must have legal authority to provide, construct, operate and maintain the proposed facilities or services
- Partnerships with other federal, state, local, private and non-profit entities are encouraged
- Matching funds of at least 15% from non-federal sources are required and can be used for operating costs

Why does USDA Rural Development do this?

The Community Connect program helps rural communities extend access where broadband service is least likely to be commercially available, but where it can make a tremendous difference in the quality of life for people and businesses. The projects funded by these grants help rural residents tap into the enormous potential of the Internet for jobs, education, healthcare, public safety and community development.

Accounting and Auditing Issues

Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

- 2 CFR 200
- Effective date: December 26, 2013
- Applicability date: Audits of fiscal years beginning on or after December 26, 2014
- Threshold for compliance: $750K or more expended on an annual basis
- Audits performed under this part must be performed annually
- Audits submitted to the Federal Audit Clearinghouse will be made publicly available

Leases

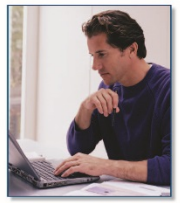
- ASC 842 released February 25, 2016
- After exposure drafts in 2010 & 2013

- Effective for public companies for years beginning after December 15, 2018
- Effective for all other companies for years beginning after December 15, 2019
- Early adoption is encouraged

Electric Accounting Training

- RUS Borrower Accounting (Electric)
- Offered by The Graduate School USA (formerly known as The USDA Graduate School
- Discontinued during the Summer 2013.
- Now available

RUS Borrower Accounting (Electric)



- *Flexibility and schedule control*
- *Paperless*
- *The ability to complete assignments at times when it is most convenient*
- *One year access period*
- *Certificate of completion included*

Graduate School, USA is pleased to offer RUS Borrower Accounting (Electric) as an on-line course.

Course Overview (ACCT8211)

This course is designed for persons who are now, or who intend to be, office managers, accountants, or bookkeepers in offices of electric utilities that have been financed by the Rural Utilities Service (RUS), USDA. It may also serve as a guide to directors, managers, Certified Public Accountants, lawyers, and engineers. It is inevitable that there are variations in some of the procedures used by individual utilities. We have attempted to teach the basic and specialized principles and procedures of accounting that are common to all organizations engaged in this type of enterprise.

The subject matter of this course progresses through the discussion of the accounts and accounting records used for work order procedure, the methods used in opening, maintaining, and closing the books, the development of financial and statistical reports and their analysis, the technical aspects of RUS accounting, the use of continuing property records, and the budgeting for, requesting of, accounting for, and repaying of loan funds.

Throughout the course, illustrations are given of the accounting records and procedures, forms, and principles recommended by RUS for use by borrowers. Every lesson concludes with a set of questions to answer or case problems to solve.

Through the study and successful completion of this course, students will be able to apply properly and accurately the accounting principles relating to the electric utility industry. Students will develop a working knowledge of the unique accounting requirements arising from the manner in which RUS borrowers are financed and the nonprofit nature of borrowers organized as cooperatives.

Course Objectives

Students who successfully complete this course will:

- Explain the specific accounting principles and terminology that apply to RUS borrowers.
- Use appropriate forms, reports, statements, and other documents, as well as the Uniform System of Accounts, correctly.
- Detail the accounting and administrative controls, both internal and from RUS.
- Recognize the accounting procedures for the typical sequence of events that occurs during the organization, preloan, original construction, and operating period of an electric utility cooperative.
- Use the applicable Federal regulations and RUS issuances to guide their practice.

To purchase the course go to:
http://graduateschool.edu/RUS

Cost: $450

For more information:
Marsha Waters-Fisher
at 202.314.4709

Graduate School USA

United States Department of Agriculture

Rural Development

USDA Rural Development is committed to the future of rural communities.

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