



Rural Utilities Service

Chad Rupe, Administrator

August 2020



United States
Department of
Agriculture

Rural Development

Infrastructure Financing

RUS is the successor to the Rural Electrification Administration (REA + FmHA W&S = RUS)

\$63 +/- Billion Loan Portfolio: \$47 Billion Electric; \$13 Billion Water; \$3 Billion Telecom

Electric Program includes financing for coal fired power plants

RUS Electric loan Program has a negative subsidy in the federal budget- no delinquencies

Other than S&E, loan levels do not require budget authority

Appropriators approve an annual Program Level (PL) exceeding \$5 Billion in recent years

RUS also makes loans and grants for rural

Water and Sewer - \$1.4 Billion annually

Broadband, Distance Learning & Telemedicine Projects –

\$744 million first round of ReConnect

Current awards: \$75 million announce so far of \$1.1 Billion in Budget Authority

Electric and Beyond!

RUS can provide low cost financing to virtually any element of electric infrastructure serving rural America.

- Distribution

- Transmission

- Generation

- Smart Grid

- Energy Efficiency

- Cyber/Grid Security

- Renewables

- CCUS

Focused on hard asset lending.

Projects must be eligible, feasible and secured.

Incentive Lender Open to All Electric Utilities Serving Rural Areas

Incentive Lender

Not Lender of Last Resort

Infrastructure lending

System & Project Loans

First Lien or Shared First Lien on assets (pledge of revenues possible for tribal/muni)

While Coops are RUS' largest customer base, program open to

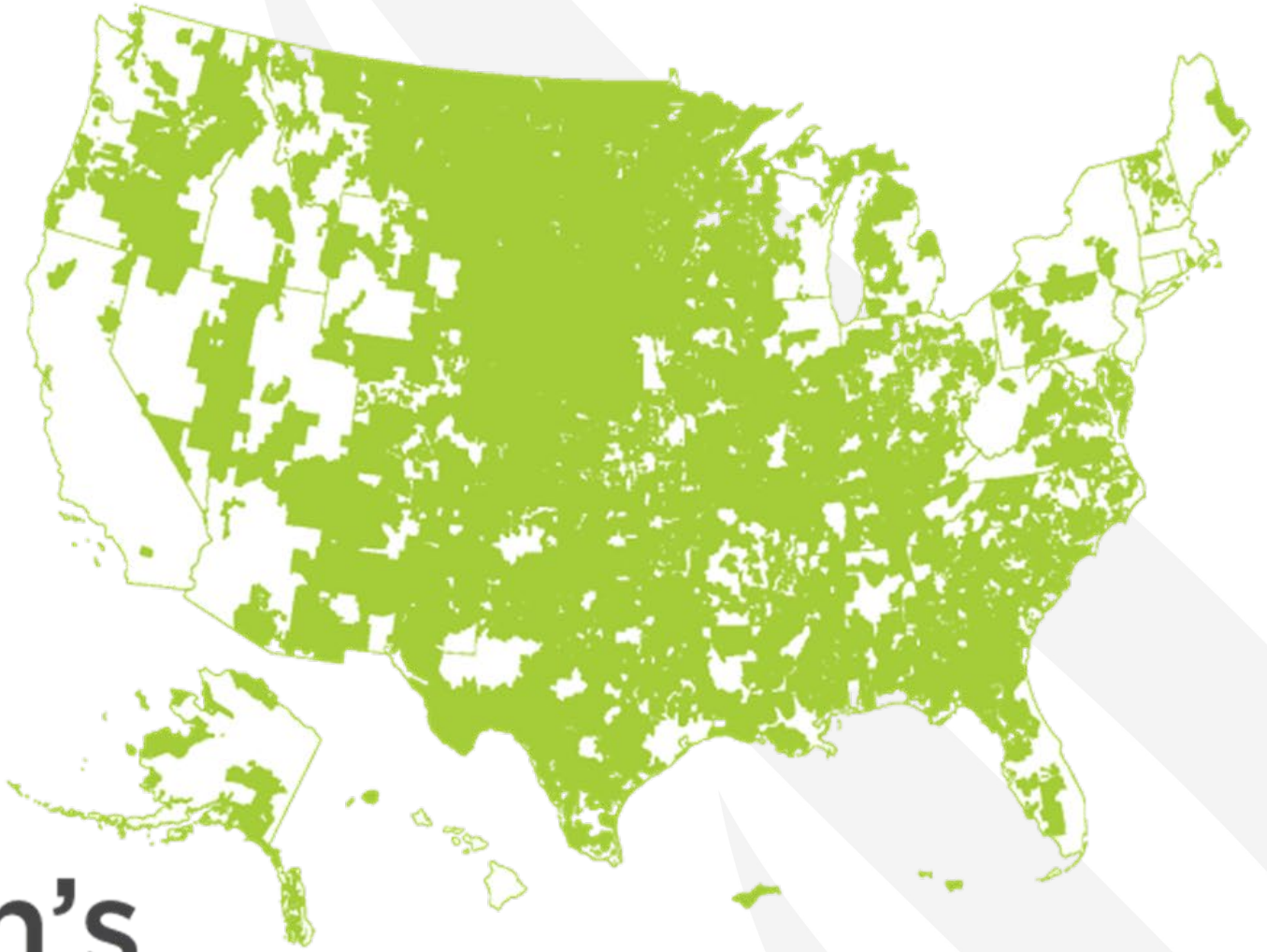
- IOU
- Municipal
- Tribal

833 distribution
and 62 generation
& transmission
cooperatives

Power

56%

**of the nation's
landmass.**



Source: NRECA

RUS Electric Programs

Fiscal Year 2019 Program Performance

The Electric Program obligated \$5.77 billion in loans and grants in FY 19:

Electric Infrastructure Loan Program

- 104 loans were obligated for a total of \$4,996,130,472
- Approximately 7.6 million rural residents will receive new/improved electric facilities
- Dollars Leveraged, \$1.77 billion

313A Loan Guarantee Program

- 2 loans were obligated for a total of \$750,000,000

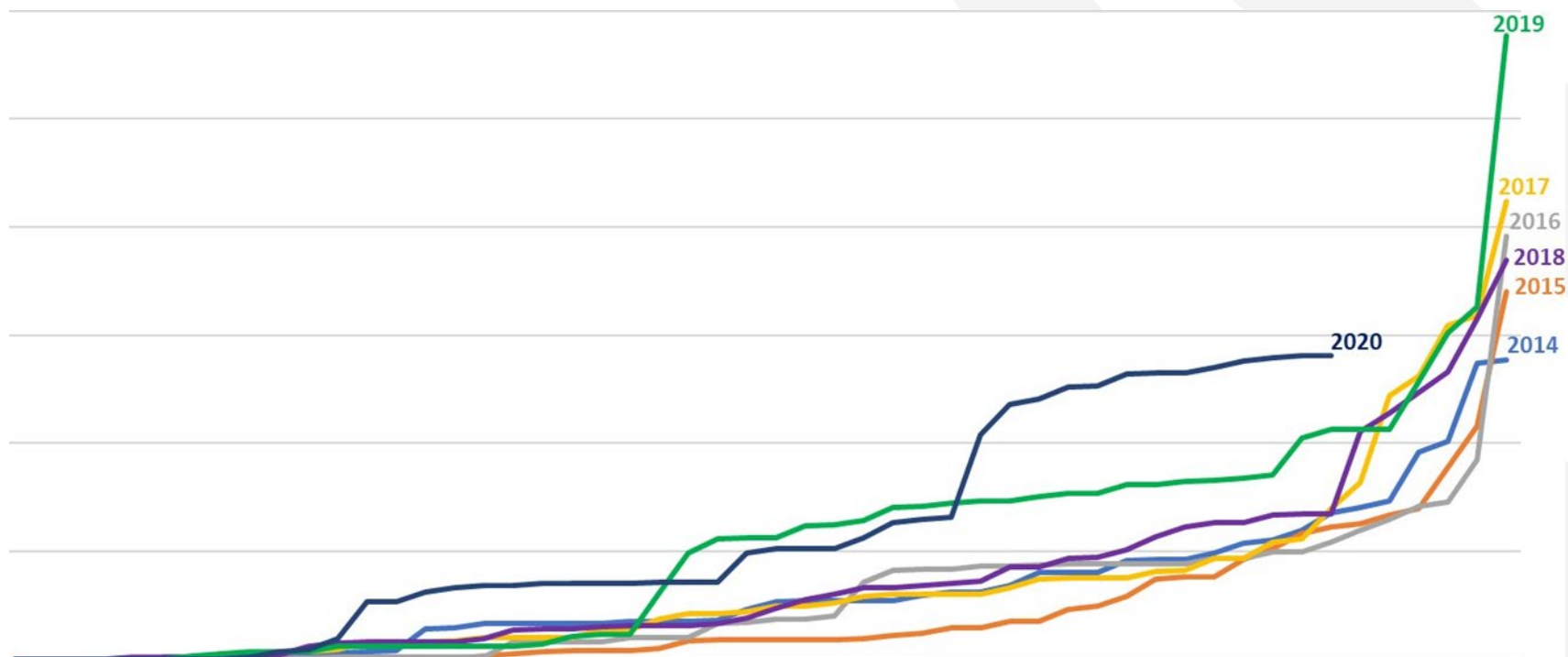
Rural Energy Savings Program (RESP)

- 6 loans were obligated for a total of \$34,200,000

High Energy Cost Grant (HECG) Program

- 6 grants were obligated for a total of \$11,668,431; \$3.9 million non-federal match: \$3.5million Denali and \$400 thousand other)

FY 20 On Track to be as Strong as FY19



Money Sale!

APPROXIMATE FFB QUARTERLY RATES

| 3-mo | 6-mo | 1-yr | 2-yr | 3-yr | 5-yr | 7-yr | 10-yr | 20-yr | 30-yr |
|------|------|------|------|------|------|------|-------|-------|-------|
| .10 | .13 | .14 | .16 | .19 | .32 | .50 | .68 | 1.05 | 1.14 |

Plus 1/8%

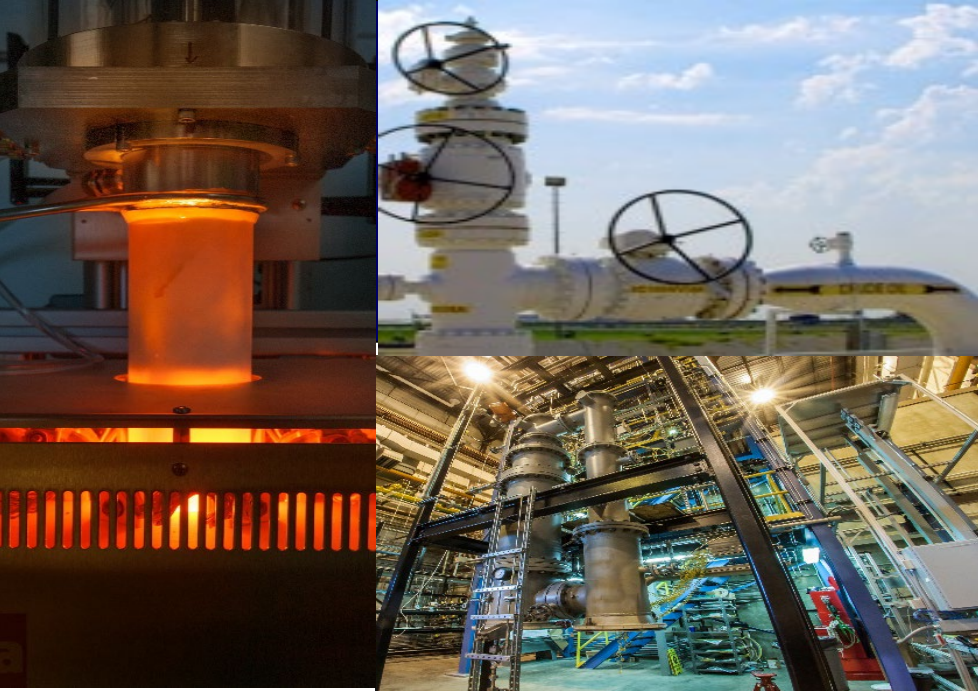
8/14/2020 rates (rates set daily)

Borrower rate set at time of draw

RUS Borrowers with Coal Assets

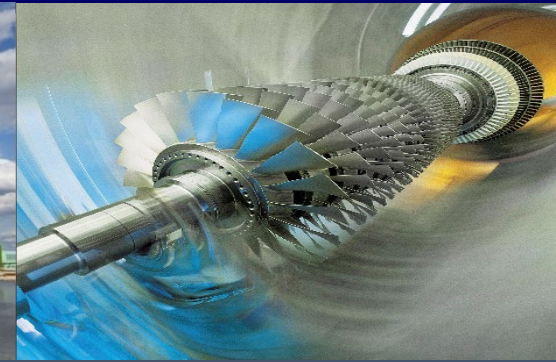
| count | RUSBorrowerId | PlantName | Plant location State | Fuel | borrower |
|-------|---------------|----------------------------|----------------------|------|----------|
| 1 | AK0006 | Healy | Alaska | Coal | yes |
| 2 | AL0042 | Lowman | Alabama | Coal | yes |
| 3 | AR0032 | GRDA | Oklahoma | Coal | yes |
| 4 | AR0034 | Turk | Arkansas | Coal | yes |
| 5 | AZ0028 | Apache | Arizona | Coal | yes |
| 6 | CO0034 | Comanche #3 | Colorado | Coal | yes |
| 7 | FL0041 | Seminole | Florida | Coal | yes |
| 8 | GA0109 | Wansley | Georgia | Coal | yes |
| 9 | IA0083 | Walter Scott | Iowa | Coal | yes |
| 10 | IA0084 | Neal | Iowa | Coal | yes |
| 11 | IL0050 | Marion | Illinois | Coal | yes |
| 12 | IN0106 | Merom Generating Station | Indiana | Coal | yes |
| 13 | KS0053 | Holcomb | Kansas | Coal | yes |
| 14 | KS0054 | Iatan 2 | Missouri | Coal | yes |
| 15 | KY0059 | Cooper | Kentucky | Coal | yes |
| 16 | KY0062 | Wilson | Kentucky | Coal | yes |
| 17 | MO0071 | Chamois | Missouri | Coal | yes |
| 18 | MO0073 | Thomas Hill | Missouri | Coal | yes |
| 19 | MS0053 | R. D. Morrow, Sr. | Mississippi | Coal | yes |
| 20 | ND0020 | Milton R. Young 1 | North Dakota | Coal | yes |
| 21 | ND0048 | Milton R. Young 2 | North Dakota | Coal | yes |
| 22 | OH0099 | Cardinal Station 1,2 and 3 | Ohio | Coal | yes |
| 23 | OK0032 | Hugo | Oklahoma | Coal | yes |
| 24 | TX0154 | Nelson | Louisiana | Coal | yes |
| 25 | TX0158 | Dolet Hills | Louisiana | Coal | yes |
| 26 | TX0161 | Turk | Arkansas | Coal | yes |
| 27 | WI0064 | Genoa #3 | Wisconsin | Coal | yes |

RUS borrowers who own all or part of a coal fired power plant



U.S. DEPARTMENT OF
ENERGY

Office of
Fossil Energy



Energy Focused DOE/USDA Memorandum of Understanding (MOU)

USDA/DOE MOU a Federal Action Geared Toward Facilitating Investments in Rural Communities

The screenshot shows a web browser window with the URL <https://www.energy.gov/articles/doe-and-usda-joi>. The browser's address bar and tabs are visible at the top. The website's header includes the ENERGY.GOV logo and navigation links for Science & Innovation, Energy Economy, Security & Safety, and Save Energy, Save Money. A search icon is also present. The main content area features a green background with the text "Department of Energy" and the headline "DOE and USDA Join Forces to Increase Energy Technology Development and Deployment in Rural America". Below the headline, the date "OCTOBER 24, 2019" is displayed. A sidebar on the left contains social media sharing icons for email, Facebook, Twitter, LinkedIn, and Pinterest. The main text of the article begins with "WASHINGTON, DC - U.S. Under Secretary of Energy Mark W. Menezes and Deputy Under Secretary Donald LaVoy today announced a Memorandum of Understanding (MOU) between the two departments to promote rural energy and the development of technologies that will support and advance rural and agricultural communities and domestic manufacturing." The text continues with "The newly-signed MOU, which was required under section 6501 of the 2018 Farm Bill, will enhance collaboration and coordination between the Department of Energy (DOE) and USDA. The areas covered by the MOU include facilitating energy-related investments in America's rural communities; streamlining, leveraging and optimizing program resources; encouraging innovation;"

Department of Energy

DOE and USDA Join Forces to Increase Energy Technology Development and Deployment in Rural America

OCTOBER 24, 2019

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USDA/DOE Memorandum of Understanding (MOU) Background

The MOU was established in response to the Presidents Executive Orders on Rural Prosperity (2017) and Energy Infrastructure (2019), and was mandated in the 2018 Farm Bill

- **The MOU establishes new, and formalizes existing, USDA-DOE collaboration, and has five primary objectives;**
 - Develop and expand energy- and manufacturing-related businesses, industries, and technologies in rural America;
 - Encourage investments in new or improved rural energy infrastructure;
 - Enhance capital access for energy-related businesses and industries in rural America;
 - Support rural community investments that anticipate growth associated with rural energy investment and development; and
 - Encourage, support, and invest in cybersecurity initiatives and grid improvements.

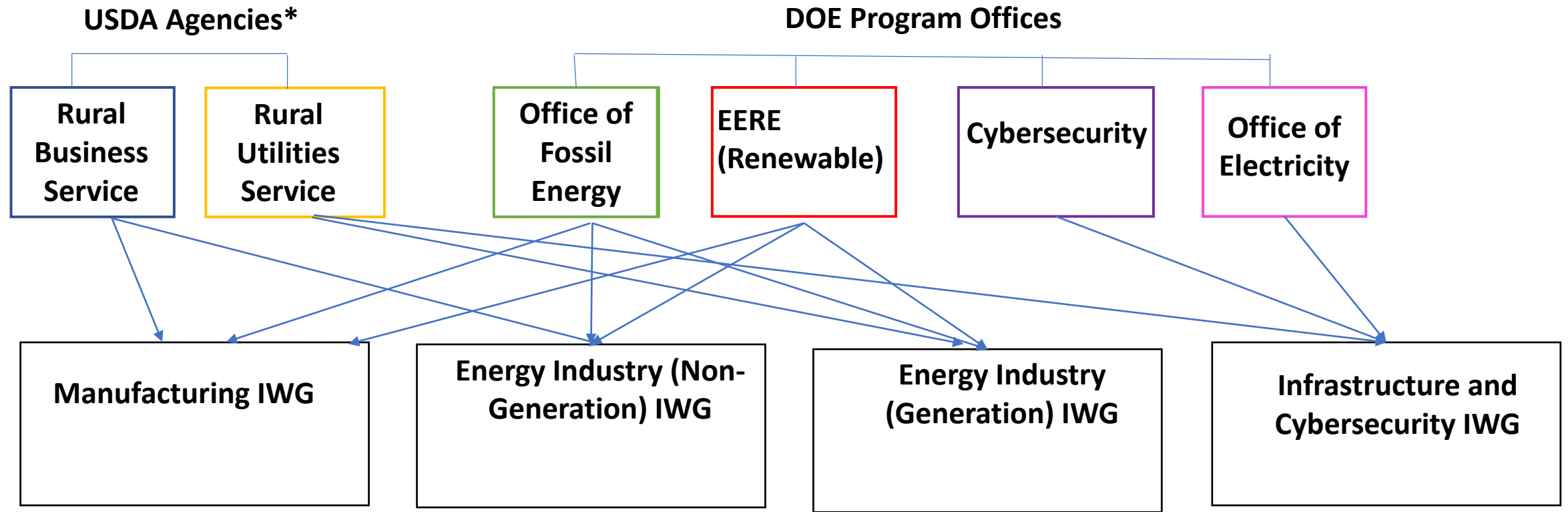


Current Status/Actions to Date

- **Key personnel have been identified from across both departments, an interdepartmental workgroup formed, and an administrative structure established to implement the MOU**
- **Four interdepartmental teams within the workgroup have been formed**
 - Energy Industry – Electric Generation
 - Energy Industry – Non Electric Generation
 - Manufacturing
 - Critical Infrastructure and Cybersecurity
- **An sixteen initial projects have been identified and aligned under the appropriate focus areas, project leads have been assigned, and efforts are underway**



IWG/Teams Crosscut Multiple Agencies/Program Offices



*USDA Natural Resources Conservation Service (NRCS) currently participates on one selected project, Rural Housing Service will be included on as-needed basis



Inter-Departmental Work Groups (IWG) and Projects

Manufacturing IWG

USDA/DOE/SBA Capital Access Forum Series

Manufacturing Facility Energy Efficiency Audits

Natural Gas and Coal Based Products Manufacturing

Energy Industry (Non-generation) IWG

CO2 Pipeline Network Routing

Energy-Agriculture-Water Nexus Drought Mitigation Effort

Biofuels Infrastructure Enhancement

LNG Energy related projects

Energy Industry (Generation) IWG

Carbon Capture Utilization and Storage Task Force

Existing Coal Plant Efficiency Improvements

Wind Innovation for Rural Economic Development

Hydro for Rural Economic Development

Infrastructure and Cybersecurity IWG

Energy Government Coordinating Council (EGCC)

APPA Preparedness and Response

NRECA and APPA Cybersecurity Training for Utilities

Reduction of Fires from Vegetation and Electric Grid Contact

Electric Grid Outage and Impact Sharing



Additional Efforts Underway Related to MOU Agreement

- **Within one year of signing of the MOU, the workgroup will produce a report on opportunities for USDA and DOE to collaborate on rural energy issues**
 - Focus on Challenges and Opportunities for Energy Related Rural Economic Development
 - Link USDA and DOE programmatic resources currently available to help address these items
- **Soliciting stakeholder (within and external to Federal Government) input on critical areas that can be addressed through this joint effort**



When to Fund CCUS Projects?

- RUS remains optimistic but will invest prudently.
- Technological & Financial Risks must be minimized to protect rural consumers & U.S. tax payers.
- Staff will perform Engineering & Financial analyses & due diligence.
 - **Proven Technology** - Commercially Available.
 - **Loan Feasibility** – Reasonable assurance loan will be repaid in full as scheduled. Bankable agreements
 - **Loan Security** – Reasonably adequate security.



Electric Program Opportunities & Challenges

Future opportunities & challenges in addition to CCUS

- Investments needed to address aging electric plant and facilities
- Potential effects on commercial, industrial and residential loads
- Smart Grid essential to modern electric grid & synergetic with broadband goals
- EV & beneficial electrification trending
- More lending for solar facilities and other renewables
- Energy efficiency, storage, microgrids and demand response interest rising
- Grid resiliency, natural disaster cyber, EMP and human threats persist

Thank You!

- Follow-up opportunities:

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Electric Programs

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