



## Leveraging Smart Grid Investments for Rural Broadband Deployment

Broadband Opportunities Council

The RUS Electric Program has a \$5.5 billion annual loan budget for financing electrical infrastructure in rural areas, **including smart grid initiatives.** 

- The Electric Program, thru the funding of:
  - Smart grid initiatives;
  - Communications facilities for energy management; and
  - Fiber to the meter for increased energy efficiency initiatives ...
- ...can aid in the **support and deployment** of **broadband** through the use of those facilities implemented for smart grid purposes.

RUS Electric borrowers seeking to deploy fiber for smart grid initiatives should consider alternative uses of their high speed networks to leverage broadband deployment in unserved and underserved.

- Business Plan What type of assets management and organization structure works best?
- Financing Plan What sources of capital are available for deployment?

**The Business Plan** – during the development and planning of the borrowers smart grid network, consider how facilities can be leveraged to provide additional broadband services:

- Cooperative provided services,
  - Cooperative deployed, owned and operated smart grid/broadband system (in states where allowed)
  - Subsidiary provided services, leasing fiber backbone from cooperative, and/or management and operations agreements
- Partnerships...with incumbent service providers,
  - Cable companies, telecommunications companies or cooperatives, others

**The Financing Plan** – Borrowers may seek a variety of financing options to assist in rural broadband deployment.

- Smart grid facilities, including related fiber networks and electronics, can be funded with RUS Electric Program funds through the regular application process
- For assets and facilities related directly to and used solely in the provision of non-smart grid related broadband services, borrowers should consider other funding sources, such as
  - Internally generated funding or equity;
  - RUS Broadband Program (part of the RUS Telecommunications Program)
  - **Private sources** such CoBank, the National Rural Utilities Cooperative Finance Corporation, etc...

#### **Benefits:**

- Future proof energy efficiency/smart grid communications and control services necessary for "smart communities and homes"
- Electric funding available for fully operational smart grid infrastructure, including fiber to the premises for load management and other smart grid tools and benefits
- Additional revenue source from leasing fiber assets as provider of backbone services to potential last mile providers
- Large footprint in traditionally underserved and unserved areas
- Competition proof
- FCC taking notice of rural electric cooperative's role and is encouraging deployment through funding opportunities

# http://www.rd.usda.gov/programs-services/all-programs/electric-programs





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