Midwest ENERGY COOPERATIVE

DATE: Monday, February 24, 2014

FROM: Robert L. Hance - President & CEO
Midwest Energy Cooperative

TO: The Honorable Marlene Dortch – Secretary
Federal Communications Commission

SUBJECT: Expression of Interest – Midwest Energy Rural Broadband Experiment
WC Docket No. 10-90

Background

Midwest Energy Cooperative is a *member-owned* electric utility serving more than 35,000 residential, agricultural, commercial and industrial customers in southwestern and southeastern Michigan, northern Indiana and Ohio. We also provide propane services under the name Midwest Propane and telecommunications services as Midwest Connections. In the past, Midwest Connections has provided dial-up and satellite Internet as well as broadband over power lines (BPL). We are now fully committed to a next generation fiber solution as we have found other platforms to be less-reliable and of insufficient capacity and speed.

Midwest Energy is one of roughly 840 distribution cooperatives across 47 states providing service to 42 million Americans and 18.5 million businesses, homes, schools, churches, farms, irrigation systems and other establishments. As an industry, we own and maintain 42% of the nation's distribution lines. That said, only 12% of Americans are customers of ours. Whereas publicly owned utilities (municipals) average 48 consumers per mile and investor-owned utilities average 34 customers per mile, electric cooperatives serve an average of 7.4 members per mile. These are the folks in need of a broadband solution.

Our Project

Plans to advance from automated meter reading (AMR) to the deployment of automated metering infrastructure (AMI) provided us the opportunity to explore a smarter grid for our members. In 2012, we contracted with Power System Engineering, Inc. (www.powersystem.org) to help us design and engineer a high-speed communications ring through substations and facilities. The total cost of this 243-mile Midwest-owned network is $9.5 million. Plans are in place to at least finance the roughly $6 million

portion of the ring that serves our southwest district through an already-approved United States Department of Agriculture - Rural Utilities Service (USDA – RUS) work plan loan.

Recognizing the significant potential of this asset, Midwest Energy contracted with Pulse Broadband (www.pulsebroadbandinc.com) to help us design a fiber-to-the-premises (FTTx) product. Utilizing the communications ring as a middle mile backbone, Pulse Broadband designed a portion of the 1,800 mile bi-directional FTTx open network using gigabit passive optical network (GPON) electronics. At the appropriate time, they will assist us in engineering the remainder of our network. Midwest Energy's system is scalable, possessing the potential for a gigabit of service to every home or business in our proposed footprint. Initially, the following plans will be offered:

Residential High-Speed Internet Packages

Basic: Up to 20 mbps downstream and 10 mbps upstream
$49.95/month

Advanced: Up to 50 mbps downstream and 20 mbps upstream
$59.95/month

Ultra: Up to 100 mbps downstream and 25 mbps upstream
$99.95/month

Business High-Speed Internet Packages

Basic: Up to 20 mbps downstream and 20 mbps upstream
$79.95/month

Advanced: Up to 50 mbps downstream and 50 mbps upstream
$129.95/month

Ultra: Up to 100 mbps downstream and 50 mbps upstream
$199.95/month

Unlimited Local and Long Distance Telephone within the U.S., Canada, Dominican Republic, Bahamas, U.S. Virgin Islands, Puerto Rico and Guam. International calling plans and other features are also available.

Residential: Includes three-way calling, caller ID (number), call ID blocking, call return, call forwarding, call waiting and voice mail.
$39.95/month

Business: Includes three-way calling, caller ID (name and number), call forwarding, hunting and voice mail.
$49.95/month

Voice services will be provided through Big River Telephone (www.bigrivertelephone.com) and video service is under consideration. Midwest Energy will offer members a $10 double-play discount for bundling their internet and telephone services with us.

Midwest Energy serves neither cities nor villages in its proposed service footprint. In these areas, incumbent Frontier (DSL) and Comcast (cable) provide voice, data and video. Rural townships in southwest Michigan are mostly devoid of anything other than satellite and Mobile Wi-Fi (MiFi). Bloomingdale Communications, a first and second round stimulus recipient, has deployed fiber in the northern-most, and most-dense, portion of our service area. Our discussions with them have uncovered no plans to expand beyond their existing boundaries.

Timetable

Midwest Energy is "shovel-ready" with its project. We have secured a temporary CLEC license from the Michigan Public Service Commission and will pursue an ETC license and other certifications when our permanent CLEC is granted in March. We have "socialized" our intent with numerous state and federal agencies and regulatory bodies in an effort to be transparent and to learn what is necessary to operate in this complex arena.

Already, Midwest Energy has deployed roughly 21 miles of our communications ring through two substations serving areas adjacent to both Schoolcraft and Edwardsburg, Michigan. In addition to assessment of smart grid potential, Midwest is evaluating the FTTx potential of laying 72 miles of fiber to 953 homes and businesses in the area. The capital requirements for our soft launch are $4,367,452 - $1,482,500 in transmission costs and the balance in FTTx costs. Our first two "beta" customers are receiving service from Midwest Energy. One is testing a 100 Mpbs plan and the other is evaluating 20 Mbps.

Midwest Energy's soft launch project allows us to better gauge member interest and service requirements before full deployment. Full deployment may take up to three years, or more, depending upon the level of support we receive from potential granting agencies. That said, when our permanent CLEC license is secured, we plan to add new customers at a planned, but much more aggressive, pace.

Project Area

Our full deployment area includes *eligible* portions of Cass, St. Joseph, Kalamazoo, Van Buren and Berrien Counties in Michigan. In this area, we estimate there are roughly 24,000 homes and 2,500 businesses. Midwest Energy serves no cities or villages and instead focuses on rural townships. As such, member density in this area is below 9 per mile. We believe there to be 80 critical community facilities and public safety entities, made up of 10 schools, 7 libraries, 23 medical/healthcare providers, 10 public safety entities, one community college, 5 community support organizations and 24 governmental facilities. Additionally, we have one Native American Tribe – The Pokagon Band of Potawatomi. We are confident many of these entities will provide project endorsement letters during the application phase of FCC's rural experiments. One such letter from Mno-Bmadsen, the Pokagon Band of Potawatomi's economic development arm, is attached as an example of partnerships we are developing.

Southwest Michigan is defined by agriculture – particularly seed corn production – and serves as a rural residential haven for those that work and study at Notre Dame, Western Michigan University and area community colleges. Additionally, those that work at Fortune 500 companies like Kellogg, Whirlpool and Pfizer tend to live in our proposed service footprint. Though we were severely impacted by a recent downturn in the recreational vehicle industry, efforts to foster an entrepreneurial environment are bearing fruit and area unemployment figures have moderated somewhat.

Midwest Energy's Midwest Connections intends to provide service to an area encompassing portions of five counties in southwest Michigan totaling 1,668.09 square miles. We will work closely with Pulse Broadband to determine the eligibility of the 42 census tracts, 169 census block groups and 8,484 census blocks within our proposed service footprint.

CASS COUNTY, MICHIGAN – 490.06 square miles to be served

11 Census Tracts
46 Census Block Groups
2,319 Census Blocks

BERRIEN COUNTY, MICHIGAN – 138.98 square miles to be served

5 Census Tracts
20 Census Block Groups
789 Census Blocks

KALAMAZOO COUNTY, MICHIGAN – 146.99 square miles to be served

8 Census Tracts
21 Census Block Groups
928 Census Blocks

ST. JOSEPH COUNTY, MICHIGAN – 374.42 square miles to be served

7 Census Tracts
30 Census Block Groups
1,974 Census Blocks

VAN BUREN COUNTY, MICHIGAN – 517.64 square miles to be served

11 Census Tracts
52 Census Block Groups
2,474 Census Blocks

Project Need

Our service area – often referred to as "Michiana" is losing population. While the volatile nature of the recreational vehicle industry in nearby Indiana has created a home-based entrepreneurial boom; many have chosen to leave southwest Michigan. Seniors are flocking to where health care is abundantly available and the home-bound have diminishing options in rural America. Workers are moving closer to their employers. Young people are seeking entertainment options and basic services like broadband. Parents, concerned for their children's educational opportunities, are abandoning schools that are limited in services they provide. Rather than placing further stress on urban infrastructure, one solution might be to provide broadband where it either doesn't exist or exists in limited scope. If workers can be productive at home, that is good for America. If young people can innovate, we all benefit. America's future truly depends on closing a digital divide that exists on both a micro (urban versus rural) level and a macro (US versus the world) level as well.

Within Midwest Energy's proposed footprint, residents, schools, libraries, farmers, first-responders, healthcare providers and the Pokagon Band of Potawatomi are seeking an affordable, reliable and high-speed option. This has provided us tremendous opportunity to leverage our investment. For instance, USDA-RUS has stepped up to the plate in helping us finance the cost of our communications ring. Merit Networks, Inc., a non-profit, member-owned organization formed in 1966 to design and implement a computer network between public universities in Michigan, continues to seek a partnership with Midwest Energy. They view us as being a catalyst in helping them reach schools and libraries in the region. The Pokagon Band of Potawatomi's economic development arm – Mno-Bmadsen – is evaluating partnership opportunities that can help us extend service to their members and we're actively engaged with both Michigan Farm Bureau and the American Farm Bureau to help bring broadband to America's farmland. There is little scarcity in leveraging opportunities for this project and we are exploring them all.

The Ask

Midwest Energy continues to refine its project requirements. As mentioned, we are financing our communications ring for smart grid applications through a USDA-RUS work plan loan. Should we fully deploy our ring, the cost will be $9.5 million. It is $6.075 million if construct communications in only our southwest district. Our FTTx capital expenditure requirements are, roughly, $54.2 million. Given the 24,000 homes and 2,500 businesses passed, we will need approximately $2,045 per passing to fully fund this project. That said, our financial model continues to be refined and we'll have solid, defensible numbers to present in our application. These numbers will be in the form of a one-time capital expenditure. We are not seeking an ongoing subsidy from the FCC. Midwest Energy will, of course, review FCC financial models to ensure our numbers are both reasonable and appropriate.

In recent financial modeling, Midwest Energy assumed a 40% take rate for residential and 30% take rate for commercial. This translates into 10,350 customers. Applying standard price points for triple-play, projected net income goes positive in year four at a fifty percent equity injection. Midwest believes fifty

percent equity funding is needed to protect company asset-to-equity ratios. That said, we'll apply only for what is eligible and what is required to be successful in providing up to a gigabit of service for rural southwest Michigan.

Total Estimated Project Cost:	$63.7 million
Midwest Energy Investment:	$ 9.5 million
Ideal FCC Investment:	$27.1 million (one-time capital expenditure)
Additional Amount to be Financed:	$27.1 million
Leveraging Opportunities:	FCC Rural Experiment s (one-time capital investment only)
	Connect America Fund (unclaimed CAF)
	Merit Networks, Inc. (assistance and dark fiber swap)
	Lynx Network Group (dark fiber swap)
	Pokagon Band of Potawatomi (financial)
	Regional Economic Development Groups (financial)
	Michigan Farm Bureau & American Farm Bureau (philosophical)
	E-Rate Program (grant opportunity)
	USDA Community Connect Program (grant opportunity)
Total Customers Served:	26,500 (estimated – minimum)
Square Miles:	1,668.09 square miles

For More Information:

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The Good Path to Good Business

February 17, 2014

Mr. David H. Allen
Vice President, Regulatory Compliance & Community Development
Midwest Energy Cooperative
901 East State Street, P.O. Box 127
Cassopolis, MI 49031

Dear Mr. Allen:

As one of twelve federally-recognized tribes in Michigan, the Pokagon Band of Potawatomi maintains its sovereign right to self-rule and its government-to-government relationships with Michigan and the United States government. From its historic base in Cass County, Michigan, the Tribe embraces a network of self-sustaining trade and self-reliance within its community. Working through its economic development arm - Mno-Bmadsen [meh no-buh MOD sen] – the Tribe seeks economic sustainability through business mergers, acquisitions and investments designed to provide long-term jobs and wealth for its 4,900 citizens in both Indiana and Michigan.

As President and CEO of Mno-Bmadsen, I see tremendous potential for a fiber project under consideration by Midwest Energy Cooperative. Already an energy provider to the Tribe, Midwest Energy can be relied upon to provide our members a reliable and robust option for voice and data services. Not only do we endorse their efforts, under the right set of circumstances, we could consider a financial or philosophical partnership to help ensure the success of our business portfolio and to provide our citizens access to telemedicine, distance learning, entertainment, tribal and governmental services and job opportunities.

Whether it is Midwest Energy or another entity, please understand we need a reliable, high-speed internet option on sovereign lands in Indiana, Michigan and other parts of the United States. Mno-Bmadsen loosely translates to "The Good Path". The good path includes essential services that allow all people – rural and urban, indigenous and otherwise – to succeed in this world. In supporting Midwest Energy, the FCC would support our efforts engender to sustainability for the Pokagon Band of Potawatomi.

Respectfully,

Troland V. Clay
President and CEO

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