STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET
LANSING

RICK SNYDER
GOVERNOR

DAVID B. BEHEN
DIRECTOR

August 2, 2016

Public Safety and Homeland Security Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Request for waiver of rule section 90.179 for the Michigan Public Safety Communications System

The Michigan Department of Technology Management and Budget (MDTMB) represent Michigan's Public Safety Communications System (MPSCS) in matters relating to FCC licenses, antenna structure registrations, etc.

The MPSCS is Michigan's statewide 800 MHz P25 digital trunking system providing communications for Michigan's state agencies, the Michigan State Police, and over 1490 other county, city, township, and tribal public safety agencies totaling approximately 74,000 radio users. The MPSCS system utilizes 246 tower sites and represents an investment of over 250 million dollars by the citizens of Michigan. Michigan prides itself on having built one of the nation's largest operating statewide public safety communications system, and providing the basic infrastructure for fully interoperable communications for the entire State of Michigan.

MDTMB requests a waiver of FCC rule 90.179(a) which states:

(a) Persons may share a radio station only on frequencies for which they would be eligible for a separate authorization.

The MPSCS uses frequencies, primarily in the 800 MHz NPSPAC band, which are allocated for public safety use. If granted, this waiver will allow certain non-profit Critical Infrastructure providers, specifically Presque Isle Electric & Gas Co-op (PIE&G), which is not eligible to use public safety frequencies, use of the public safety frequencies licensed to the MPSCS on a general basis. The non-profit member owned cooperative provides utility service exclusively to Michigan's citizens in nine (9) counties in Michigan's northern Lower Peninsula.

With grant of this waiver PIE&G would have access to and use the MPSCS system for exchange of critical information with government agencies. They would have access to selected emergency and proprietary talkgroups on the trunking system. They would also have access to the analog mutual aid channels. The interoperability provided by this

7150 HARRIS DRIVE • P.O. BOX 30631 • LANSING, MICHIGAN 48909
www.michigan.gov/mpscs • 517-284-4100 • 517-284-4066 FAX

waiver would provide dedicated communication paths between local and regional emergency management offices and public utilities that are today limited to retail grade commercial phone services. These services have proven to be challenged during times of local emergency conditions and during regular first responder efforts for structure fires and other mandatory joint response emergencies.

47 C.F.R. 90.175 provides for sharing of radio facilities between licensees on frequencies for which both licensees are eligible. Under MDTMB's proposed waiver of the rule, this specific Business and Industrial class user would be allowed access to 800 MHz public safety channels licensed to the State of Michigan. This would be on a non-profit cost sharing basis under terms of agreements between MDTMB and the company. Existing MPSCS users will also benefit by spreading the fixed system costs over additional fees. Those agreements spell out the specific terms and conditions of the companies' use of the MPSCS.

MDTMB monitors the radio system network capacity very closely and maintains a 2% or better "Grade of Service" (GOS) standard. If necessary, MDTMB will adjust affected site's channel capacity to insure an adequate grade of service for public safety users. Part of PIE&G's commitment to the MPSCS is to fund the addition of infrastructure (additional base stations) at eight (8) MPSCS sites in areas where over 90% of their radio system traffic will impact system resource availability. These base stations will be licensed using frequencies from the 800 MHz Business and Industrial Land Transportation (B/ILT) Pool. Thus public safety agencies in those areas will have enhanced access to the system without having to exclusively use dedicated NPSPAC public safety frequencies or provide additional funding. Since the operational area is large, we anticipate B/ILT spectrum being unavailable in some areas, we will therefore also consider vacated Sprint spectrum in the interleaved band. Due to 800 MHz rebanding, there are vacated channels in the interleaved portion of the band which are made available exclusively to public safety for three years and to both public safety and critical infrastructure entities for an additional two years. We will utilize this spectrum as appropriate under applicable rules and timelines if necessary to supplement capacity. If spectrum cannot be located in certain areas, the utilities' system use (access) will be prioritized and limited appropriately. Measures will be taken to insure that capacity for public safety will not be compromised. PIE&G has also agreed to share infrastructure, such as tower space, on an as needed basis.

PIE&G would have a total of about 56 radios, but they anticipate that only 25-35 total would be active at any given time. Even if all their radios were active, their service area is extensive and largely rural thus spreading their units out over many counties and sites and minimizing the loading impact. PIE&G has indicated that their radio use occurs essentially during daylight working hours as their crews perform maintenance of their system. This period is not normally a peak use period for public safety users. PIE&G also indicates that the bulk of their use consists of brief communications for dispatch assignments and transmission line switching.

It is important to realize that the MPSCS has a 24/7/365 Network Communication Center (NCC) which constantly monitors the performance of the network. NCC personnel using the network management system can assign lower priority to PIE&G

radios, restrict their access to only certain sites of the network, or shut down their access to the network entirely should it become evident that their use of the network is negatively impacting public safety agencies access. PIE&G has also agreed to share infrastructure on an as needed basis. Michigan does not anticipate a network congestion problem.

MPSCS currently utilizes both 800 MHz and 700 MHz narrowband voice frequencies although the great majority of the system utilizes 800 MHz. Through system and radio configuration, PIE&G will be restricted from using 700 MHz frequencies on the MPSCS. Therefore we are not requesting a waiver for any rules regarding 700 MHz spectrum.

The Northeast Power Blackout of 2003 affected much of the Northeastern U.S., the Midwest, and Ontario Canada and highlighted the vulnerability of the nation's electrical power grid. Disruption of the electrical power grid due to weather, flooding, earthquake, system problems, or terrorist activity is a very real possibility. During such interruptions, normal communications channels may also be severely disrupted. The MPSCS has been designed with integral long outage duration backup power capability and proved itself by continuing to fully function throughout the extensive blackout. MDTMB firmly believes that allowing the specified companies to utilize the MPSCS enhances the rapid and orderly restoration of critical services to the citizens of Michigan, without costly and un-necessary duplication of communication infrastructure.

In September of 2015 Cherryland Electric Cooperative was granted a waiver to join the MPSCS. As a result they have been able to work and communicate more efficiently. Local first responders and Cherryland share a common talk group to communicate on and are utilizing this for true interoperability.

PIE&G as part of the Michigan Electric Cooperative Association and in partnership with the Michigan Municipal Electric Association provide mutual aid assistance to other utilities across the state of Michigan in emergency outage situations. The state wide coverage of the MPSCS system would be invaluable to both the utilities and the public safety services to be able to maintain communications between utility organizations and public safety agencies across the state.

The MPSCS is eager to engage in this membership to help resolve the current interoperability and emergency communications challenges so that the mutual benefits can be realized as soon as possible. MDTMB believes it is vital to the public interest to facilitate emergency communications to this Critical Infrastructure provider and Michigan's state government, emergency management, and public safety agencies. MDTMB specifically requests that Presque Isle Electric & Gas Co-op be allowed to use the MPSCS licensed 800 MHz channels for communications with Michigan state government, state and local emergency management, and public safety agencies.

Sincerely,

Bradley A. Stoddard, Director
Department of Technology, Management & Budget
Michigan Public Safety Communications System