

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Ex Parte* Letter
WT Docket No. 17-200

Dear Ms. Dortch:

I write to support the FCC's unanimous decision to adopt an NPRM for the 900 MHz band that supports the objective of creating a broadband opportunity for utilities and other enterprise users by repurposing the band from exclusively narrowband to a mixture of both narrowband and broadband segments. While I am a consultant to pdvWireless, Inc., one of the main parties to this docket, I was Vice President and General Counsel to the Utilities Technology Council (UTC) and Sr. Director at the Edison Electric Institute. In those two positions, I drove advocacy on modernization of utility operations and the challenges faced by utilities in trying to share or otherwise obtain private spectrum below 1 GHz. I'm filing these comments because I believe that UTC's position is currently and unfortunately a compromise between those utilities that fully support the NPRM and those incumbents, like other incumbents before them, that are concerned about the impact of the rebanding on their existing use of narrowband in the 900 MHz band.

UTC has been one of the industry's leading proponents of spectrum acquisition for utilities over at least the last few decades. UTC's historic position is well explained in its comments before the US Department of Energy's proceeding *Implementing the National Broadband Plan by Studying the Communications Requirements of Electric Utilities To Inform Federal Smart Grid Policy*.¹ UTC's position has been that:

¹ *In the Matter of Implementing the National Broadband Plan by Studying the Communications Requirements of Electric Utilities To Inform Federal Smart Grid Policy, NBP RFI: Communications Requirements, Comments of Utilities Telecom Council* (now Utilities Technology Council), July 12, 2010 at 2-3.

SUMMARY

Utilities and other critical infrastructure industries (CII) rely on private internal communications networks to ensure the safe, reliable, efficient and secure delivery of electric, water, gas and other essential services to the public at large. Smart grid and other CII communications needs will require that utilities and other CII upgrade their communications systems. Utilities and other CII will use various different technology solutions, such as fiber, microwave, and land mobile radio, at different tiers of their communications network, such as the Tier 1 core backbone, the Tier 2 distribution backhaul and the Tier 3 access layers of the network. While utilities will use various technology solutions, wireless solutions will play an essential role for quick, cost effective and reliable wide area coverage and long range backhaul. However, utilities lack access to spectrum that is suitable to support their wireless system upgrades.

... Lower frequency ranges (i.e. below 1 GHz) are especially needed at the edge of the network in order to penetrate walls and other obstructions and to overcome moisture and foliage, which can block or otherwise degrade communications at higher frequencies.

- 1) Utilities lack access to spectrum that is suitable to support their wireless system upgrades;
- 2) Lower frequency ranges (i.e. below 1 GHz) are especially needed at the edge of the network in order to penetrate walls and other obstructions and to overcome moisture and foliage, which can block or otherwise degrade communications at higher frequencies; and
- 3) Promoting access to spectrum will accelerate the deployment of smart grid and other CII communications, which will in turn promote larger public policy goals for energy independence, infrastructure security, environmental quality and public safety.

I believe that the Commission's unanimous decision to issue the NPRM appears to be consistent with UTC's historic requests for private spectrum below 1 GHz. pdvWireless has committed to this Commission its sincere desire to work with all incumbents to reach a mutually beneficial resolution of their specific situations. While I am a consultant to pdvWireless, my history as an advocate for smart grid and private 1 GHz broadband spectrum is the result of my understanding of what is required to help all energy and water utilities and other critical infrastructure industries meet the current and future needs of their consumers.



Michael Oldak

May 30, 2019

Utilities have and will continue to use commercial carriers to support some of their applications; but the majority of utilities will primarily rely on private internal communications for their mission-critical applications. Many mission-critical applications have functional requirements for survivability, availability, coverage, latency, security and life cycle that carrier services might not currently be configured to meet. ...

Urgent action is needed to address utilities communications needs. Utilities and other CII are deploying smart grid and making investments in communications upgrades now. Promoting access to spectrum will accelerate the deployment of smart grid and other CII communications, which will in turn promote larger public policy goals for energy independence, infrastructure security, environmental quality and public safety. Therefore, UTC looks forward to working with the DOE, as well as the FCC and NTIA to support the communications needs of utilities and other CII.