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To: Behnam Ghaffari

Date: May 03, 2019

Subject: 0794-EX-ST-2019

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Message:

We are demonstrating pCell technology that increases spectral efficiency of LTE CBRS networks by exploiting interference produced by distributed low-power radio devices to create multiple concurrent interference-free channels to LTE devices within the same frequency band. The radio devices are placed a few feet apart from one another and operate like a large array. More details about the technology are provided in this IEEE conference paper:

<http://files.artemis.com/151109-Achieving+Large+Multiplexing+Gain+with+pCell-IEEE+Asilomar+2015.pdf>

The capacity gains offered by pCell technology scale linearly with the number of radio devices and one of the objectives of this trial is to evaluate those gains when a large number of devices is used in indoor deployments. While the system works with 50 radio devices, it would be preferable to operate with 100 devices. But if that is not a possibility, we can easily reconfigure the system to operate with lower number of devices.