



1129 20<sup>th</sup> Street | Suite 350 | Washington, DC 20036  
202.872.0030 Phone | 202.872.1331 Fax  
[www.utc.org](http://www.utc.org)

March 5, 2013

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

Re: Notice of Ex Parte Presentation -- Request by Progeny LMS, LLC for Waiver of Certain  
Multilateration Location and Monitoring Service Rules (WT Docket No. 11-49)

Dear Ms. Dortch:

UTC is hereby filing the following *ex parte* notice in connection with the above-referenced proceeding. On Friday, March 1, 2013, Mike Oldak on behalf of the Utilities Telecom Council (UTC) conducted a telephone call with Louis Peraertz, Legal Advisor on Wireless, International, and Public Safety issues in the Office of Commissioner Mignon Clyburn. The substance of the discussions was consistent with the comments filed by UTC on the record.

Specifically, UTC expressed its concern that Location and Monitoring Services (LMS) by Progeny LMS, LLC could cause unacceptable interference to millions of smart grid and smart meter devices that utilities and other critical infrastructure industries use to provide essential energy and water services to the public at large. UTC urged the Commission, consistent with the recently passed resolution by the National Association of Regulatory Utility Commissioners (NARUC),<sup>1</sup> not to authorize commercial deployment and operation of Progeny's systems until further testing can be conducted and it is shown that no unacceptable interference will be caused to unlicensed operations in the 902-928 MHz band, including those by utilities and other critical infrastructure industries.

In addition, UTC responded to Progeny's Permitted Written *Ex Parte* Presentation of February 25, 2013 on two specific issues. First, UTC contradicted Progeny's assertion that "UTC incorrectly represent[ed] in its letter that Progeny agreed to undertake further joint testing with PG&E or with other UTC members."<sup>2</sup> UTC recounted that Progeny had in fact offered to engage in further tests in two separate discussions that took place during NARUC's Winter Meeting, as described in UTC's previously-filed *ex parte* notice of February 20, 2013. As explained in UTC's *ex parte*, one discussion took place

---

<sup>1</sup> NARUC *Resolution to Promote Co-Existence in the 902-928 MHz Spectrum Band*, Sponsored by the Committee on Telecommunications, Adopted by the NARUC Board of Directors, February 6, 2013.

<sup>2</sup> Letter from Bruce Olcott, Counsel to Progeny LMS, LLC to Marlene H. Dortch, Secretary, Federal Communications Commission in ET Docket No. 11-49 at 2 (filed Feb. 25, 2013).

during the panel session at NARUC in which Progeny's CEO, Gary Parsons was asked by Commissioner Gregg Sayre, New York Public Service Commission, how long it would take to actually conduct additional testing. Based upon Mr. Parson's previous statements during the panel, Commissioner Sayre suggested that additional testing might take 6 months or maybe a year at most. Mr. Parsons agreed with Commissioner Sayre's suggestion that such additional testing would not be unreasonable. In response, UTC's General Counsel, Mike Oldak suggested that he would work with Progeny to develop the additional testing. Following the panel, Progeny's counsel Bruce Olcott suggested to Mr. Oldak that Progeny could conduct additional testing with PG&E and turn their system on and off to check for interference. Mr. Oldak responded that he was not qualified to make a determination as to whether or not that would be a sufficient testing of the Progeny system but would work with Progeny to get someone who was a qualified RF engineer to determine how to proceed. Clearly, Mr. Oldak was reasonably led to conclude that Progeny had agreed to engage in further testing with utilities.

Second, UTC contradicted Progeny's assertion in its *ex parte* that its tests with Itron could not be used to determine if Progeny's system would interfere with a utility SCADA network (since Itron does not make SCADA networks), but that its testing with Landis + Gyr Corporation (L+G) did confirm its ability to operate in the 902-928 MHz band and not create unacceptable levels of interference to SCADA systems.

While Progeny claims that its testing with L+G shows that it will not interfere with SCADA networks and therefore no additional testing is required, the testing that was conducted does not justify such an assertion. First and maybe dispositive of the issue is that UTC's conversations with representatives from L+G indicate that L+G does not make SCADA networks, despite Progeny's assertion that it does. L+G makes distribution automation networks, which are separate and distinct from the more sophisticated and more crucial SCADA networks. Second, Progeny's tests merely involved the L+G radios, and did not measure the impact of interference on a SCADA network. This distinction is extremely important.

Radios are one of the most critical parts of a SCADA network, and underscore UTC's concerns about actually testing Progeny against a fully deployed SCADA network. As Progeny correctly points out in its *ex parte*, modern radios include frequency hopping spread spectrum (FHSS) technology and frequency-shift keying (FSK) modulation to support spectrum sharing. However, this fact does not alleviate the concern of UTC and the other Part 15 users as to whether or not Progeny's high power transmissions will create unacceptable interference to SCADA networks.

As Progeny correctly points out, radios will "work" or implement FHSS and FSK workarounds. However, these new technologies do not eliminate UTC's concerns over cumulative impacts on actual SCADA network operation, specifically the impact on latencies and packet losses, a critical aspect of successful network operation. UTC is concerned that Progeny's high power transmissions will cause increased latencies and loss of packets on SCADA networks. Simple tests on radios do not replicate the multiple impacts that a large number of Progeny transmitters can have on a low-power SCADA network and the seemingly overlooked fact that such impacts are also cumulative as the network relays messages from one radio to another. Additional testing on an actual SCADA network is also important because the overall effect on time-outs and data rates is completely dependent on the scope and scale of the network. Large scale deployment tests will also reveal whether multiple Progeny transmitters will

have multiple impacts on the same SCADA network, creating additional cumulative latency and packet loss issues.

The facts are that Progeny conducted tests with companies that do not manufacture SCADA networks and did not engage PG&E in discussions to test their SCADA network, despite Progeny's claims in its *ex parte* that it has been operating for three years in PG&E's service territory without causing interference. The Commission may not reasonably conclude from these facts that Progeny's operations will not create unacceptable interference with electric utility SCADA networks. The potential risk of interference is compounded by the fact that in most urban areas there are multiple SCADA networks in operation for water and gas utilities, as well as other critical infrastructure industries.

That is why UTC filed its *ex parte* on February 20, 2013 in order to inform the Commission that it believed that Progeny was going to engage in further testing using utility SCADA networks. That is also why UTC is filing this instant *ex parte* to clarify its understanding of the offer that was made by Progeny. UTC is dismayed by Progeny's retraction of that offer in its *ex parte* of February 25, 2013. Clearly, if any further testing is going to be conducted using utility SCADA networks, the Commission is going to need to force Progeny to do it.

Please do not hesitate to contact the undersigned if you have any questions

Respectfully,

A handwritten signature in cursive script that reads "Brett Kilbourne".

Brett Kilbourne

cc: Louis Peraertz