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August 30, 2002

Mr. Tim Johnson
American Telecommunications Certification Body Inc.
6731 Whittier Ave
McLean, VA 22101

RE: Comments of August 1, 2002
APPLICATION: P9X-EMS-MM-GE Eka Systems, Inc.

Dear Mr. Johnson:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in ***bold italic***. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

Gregory M. Snyder
Chief EMC Engineer, Wireless/Telco Services Manager

Brian J. Dettling
Documentation Specialist WLL Project: 7044

August 1, 2002
RE: Eka Systems, Inc.
FCC ID: P9X-EMS-MM-GE

1) Please confirm that confidentiality is NOT requested on the parts list. If Eka Systems wishes to request on this exhibit, please update the confidentiality letter.

R. The letter has been updated. Please see exhibit "Revised RFC Letter.pdf".

2) Please provide external photograph that show the EUT as tested, a photograph showing placement of the board inside the device, additional photographs to show the general construction of the internal portion of the meter the device was tested within, and a clear photograph of the back of the TX module.

R. Please see exhibits "Meter Test Fixture.pdf", "Additional EUT Photo.pdf".

3) The Theory of Operations/Users Manual discusses this transmitter board being an accessory board installed in an electric meter. Please provide information regarding what meter(s) this will be installed within (Test Report lists General Electric kV Vector). If Eka Systems wishes this filing to be representative of multiple meters, then this fact should be clearly represented in the application and detailed information provided as to the construction variances between the meters (and justify why they do/do not affect EMI). Depending on the construction differences, test data may be required for each model, or at least to obtained in order to determine the worse case model. Without this information, the filing can only cover the product as tested. Construction difference between meter makes will likely require a permissive change. Please let me know how you wish to handle this issue.

R. The Test Report has been updated to describe the BlueMeter as a modular device to be installed only for use in the General Electric kV Vector meter as tested. Please see exhibit "Revised Module Test Report.pdf".

4) The submittal seems to partially support a modular approval but does not request this, provide the necessary information for modular approvals, nor was the sample tested in a stand alone configuration. The operational description mentions the board as an accessory board (retrofitting?). This also tends to suggest a modular approval. A limited modular approval (LMA) may be a suggestive course of action here but does not appear to be requested or tested as such. Please comment.

R. The BlueMeter is to be approved as a device for integration into new GE kV Vector electric meters.

5) Please explain if this device is offered for sale only as an upgrade, or will it also be sold already installed in a meter.

R. The device is to be sold as tested in the GE kV Vector meter.

6) The labeling information should also include the statements required by 15.19(a)(3)

R. As the unit is installed in the electric meter, the required labeling has been included in the manual. Please see exhibit "Revised User Guide.pdf".

7) From the photographs provided and the labeling information, it is not clear where the label is placed relative to the whole device and if it is readable from the outside of the device. Please provide further information and/or photographs.

R. Instructions have been included in the manual to include the FCC identifier label in a location that may be visible after installation. A label location graphic has been provided. Please see exhibit "FCC Label Location- Meter Exterior.pdf".

8) I have a concern with the label if it can't be viewed from the outside. The "two part" label [15.19(a)(3)] will never be seen by the end user unless he disassembles his electric meter. This is an

unlikely event. The device is larger than the palm of your hand, therefore I expect there should be easily enough "real estate" to place label on outside.

R. Per our discussions it was determined that since the unit is installed in the electric meter, the required labeling could be included in the manual.

9) In addition, if "retrofitting" is permitted, how does the Applicant propose to meet the labeling requirements?

R. The BlueMeter module is not intended to be retrofitted into service meters already in use. The unit is only to be installed as "OEM" in new meters.

10) Devices of this type are typically classified as mobile, but the RF exposure information classifies the device as a 'fixed' device. 'Fixed' requires that the user maintain 2 meters between humans/users and the antenna. Given the output power and antenna gain information, it might be better to consider the device as a mobile transmitter (> 20 cm from antenna). Otherwise, please justify how 2 meter will always be maintained for RF exposure compliance.

R. The MPE document has been revised to list the device as a Mobile instead of a Fixed installation. Please see exhibit "MPE Report Rev 1.pdf".

11) The users manual should include RF exposure information such as (sample given is for mobile classification): "NOTE: The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

R. The User's Manual has been updated to include the RF Exposure Warning. Please see exhibit "Revised User Guide.pdf".

12) The users manual appears to be for part of a system. Shouldn't the users information specified in 15.105 be included in the manual?

R. The system is used by a utility company and therefore it is considered that the manual would not require the "User's Information" as specified in 15.105. However, if this is required Eka Systems has agreed to include this in the manual.

13) The information in this submittal mentions that the Blue Tooth Module is capable of +20 dBm, but has been set to +10 dBm. Please confirm that the power is not adjustable in the field or by the end-user.

R. The Test Report has been revised to clarify that the BlueMeter Module is set to +10dBm and can not be changed by the end-user.

14) The peak radiated data does not appear to calculate properly in the tables, please explain.

R. A pre-amplifier was used during these measurements. A column has been added to the peak data tables to account for the pre-amp gain. Depending on the setup the amplifier gain is either added as an offset within the spectrum analyzer or at the top of the spreadsheet used for data collection.

Additionally, 2 different pre-amplifiers may be used. One has a gain of 30dB and one has a gain of 34dB. Notes have been added to the revised Test Report data tables.