

Justification for 169 Units

As described below, it is critical that the Applicant be permitted to install and test 169 transmitters throughout Atlanta's MARTA rail transit system.

The Applicant intends to begin testing on 169 pairs of rail vehicles (hereinafter referred to as Units) in the MARTA rail transit system. A sample size of 169 Units is necessary for the following reasons: (i) in order to effectively test all possible areas along the system for interference, the test must cover Units that travel across all areas in the entire rail system, (ii) each Unit will contain an independent infrastructure and must be tested throughout the entire system so as to determine any intra-system interference, (iii) each Unit will contain an independent infrastructure so that test results from all Units will provide the greatest sampling number, thereby potentially reducing the sampling error and providing the most accurate test results and (iv) the installation plan provides for installation by rail vehicle type so that the Applicant will have installed all vehicles of a certain type prior to installing the next vehicles of a different type.

Different Units may travel to different locations within the rail system. MARTA often interchanges Units when making up two, four, six or eight-car trains. The Applicant cannot control where a particular Unit will travel. In order to effectively test all possible areas along the system for interference, the test must cover all 169 Units.

Each Unit is that each Unit will be wired as a self-contained infrastructure. Therefore, it is critical that the Applicant test each Unit, throughout the entire MARTA rail system, to determine whether it "bleeds" from one Unit to another, thereby creating intra-system interference.

Because each Unit will be a self-contained infrastructure, test results should be gathered from the greatest possible number of Units so as to provide the potential for the largest sampling number and ensure the most accurate testing results. The Applicant cannot rely on the results from one Unit being applicable to the results of another Unit.

The MARTA system is comprised of three types of rail vehicles: Models No. 310, 311 and 312. The Applicant's installation plans provide for the Applicant to conduct the installation by rail vehicle type. In other words, the Applicant will complete all Model 312 railcars before installing the Model 311 railcars and all Model 311 vehicles will be completed prior to installation of the Model 310 railcars. As each type of rail vehicle is different, it is necessary for the Applicant to test all types of rail cars throughout the entire MARTA system.

The results from testing will be available immediately after all Units are installed and operated along the entire MARTA rail system.