

Supplemental Submission to Experimental License Application

Toyota Motor Engineering & Manufacturing North America, Inc. (“Toyota”) submits this supplement in response to the request by the Office of Engineering and Technology to address safety measures that will be employed to avoid or mitigate the risk of harm to humans and animals from EMF exposure.

The wireless charging mechanism is equipped with safety features to prevent inadvertent exposure to radiation hazards. Charging transmissions will not commence until the driver exits the vehicle and locks the doors. In addition, the vehicle will be equipped with a sensor that will cause charging to stop automatically if an object is detected near the charging pad unless trained personnel are monitoring the test area.

Toyota’s application identified two locations for the testing of its wireless power transfer system for charging electric vehicles. At each location, field monitoring equipment will be used to measure and monitor field strength and emission levels. Personnel at both facilities operating the equipment will receive training regarding prevention of radiation exposure. In addition, the testing environment at each site will be controlled to mitigate any potential hazards.

At the Toyota location in Ann Arbor, Michigan, the charging station will be set up within a restricted-access courtyard between buildings where only authorized persons may enter. The charging station will be located underneath a metal pavilion in the courtyard. Retractable caution barriers will surround the station and will only be removed when the vehicle is exiting or entering the area or when trained personnel are monitoring the test area. In addition, appropriate signage will alert personnel of the potential hazards and will indicate when testing is in progress.

At the Argonne National Laboratory (“ANL”) in Argonne, Illinois, the charging station will be installed within a parking lot within ANL’s campus, to which access is limited to authorized persons. The testing area will be cordoned off, and trained personnel will be on site when the wireless charging system is on. In addition, signs will be posted alerting personnel when testing is in progress.

Because testing at both locations will be in a controlled environment, it is highly unlikely that the general population will be in the vicinity of the test equipment. The safety measures described above are intended to reduce the risk of accidental exposure of personnel at the facilities, and personnel involved in the testing are expected to receive the appropriate training regarding the prevention of radiation exposure during the operation of the equipment. Finally, the safety mechanisms built into the charging equipment itself are aimed at the reduction of any potential exposure.