

QUESTION 5: PURPOSE OF OPERATION

As stated in response to Question 4, Applicant is developing communications equipment to be used for Positive Train Control (“PTC”) applications. Applicant proposes to conduct analysis and tests of PTC equipment in the Seattle, Washington area. Applicant’s objective is to evaluate PTC radio frequency modems along various paths and at various locomotive speeds.

A PTC system is comprised of four segments:

Office Segment – Consists of software functions distributed on hardware platforms.

Locomotive Segment - Resides on-board the locomotive and interfaces with cab equipment such as air brakes, train line etc., and provides a graphic display for crew interaction.

Wayside Segment - Interfaces with wayside devices, including switch, signals, and track integrity to provide status to the other system segments.

Communication Segment - Provides the means of communications amongst the other three segments. The communication segment provides the means to deliver these authorities and restrictions from the train dispatch system and also convey wayside device status. Process control mechanisms are implemented to guarantee data integrity and authentic receipt of this information from the office and the wayside. This approach provides a homogenous wireless network to support interoperability among foreign roads, thus allowing wireless connectivity to any PTC equipped locomotive from the train dispatch office and from the wayside devices.

Applicant is requesting authority to confirm certain performance requirements of the communications segment.