

## **Request for Experimental Authority**

BNSF Railway Company (“BNSF”) requests experimental authority for operation of three GPS passive antenna repeaters to broadcast the GPS signal into the company’s indoor central repair facility as part of the company’s Positive Train Control (PTC) implementation, in furtherance of the congressional mandate to deploy PTC on designated line segments by the end of 2015 pursuant to the Rail Safety Improvement Action of 2008 (“RSIA”).

BNSF is currently authorized to operate a GPS antenna located at rail facilities in Kansas City, Kansas and Alliance, Nebraska under experimental call sign WG2XQK. BNSF is requesting to modify this authorization to add an additional GPS antenna location in Topeka, Kansas. The GPS antenna subject to this request will retransmit the GPS signal into the indoor central repair facility where the company is implementing GPS equipment to be installed on the locomotives as part of BNSF’s deployment of PTC. The GPS equipment installed in the locomotives will provide specific location fix information for traveling trains. Use of the GPS antenna at the Topeka Maintenance Terminal facility will allow BNSF to test the equipment installed in the locomotive and provide an immediate critical analysis of system status.

The rebroadcast of the GPS signal through use of the GPS passive antennas will allow the continued development of BNSF’s PTC system which will result in a quicker development timeline, but also facilitate the design and development of the PTC providing for safer movement of freight and passengers on the nations rail infrastructure. Absent the GPS repeaters, BNSF would not be able to test the GPS capability of installed PTC units indoors, which will slow the company’s deployment schedule. Because of the tight timeframe mandated by the RSIA, grant of the requested license is in the public interest.

In connection with the FCC Form 442 submitted with this request, BNSF agrees to the following special conditions for the proposed operations:<sup>1</sup>

1. Operation is limited to activity for the purpose of testing radionavigation satellite service (RNSS) equipment and systems.
2. BNSF Railway Company shall post signs on doors to the test area notifying that, “GPS re-radiator is in use and the GPS information you receive may be in error.”
3. Jeffrey Gray will be the designated point-of-contact, available at telephone number 913-551-4640, in case of any harmful interference during testing.
4. The test equipment will only be used indoors and shall be under the control of BNSF Railway Company.

Should the Commission require additional information, please contact Greg Kunkle, Keller and Heckman LLP, 1001 G Street NW, Suite 500 West, Washington, DC 20001; kunkle@khlaw.com; 202.434.4178.

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<sup>1</sup> In addition, BNSF requests that the station identification requirements of Section 5.115 of the Commission’s Rules be waived.