

Narrative Statement
Capitol Broadcasting Company, Inc.
Request for Part 5 Experimental Authority

In this application, Capitol Broadcasting Company, Inc. (“CBC”), the licensee of full-power television station WRAL-TV, Raleigh, North Carolina (FID 8688), respectfully requests special temporary authority (“STA”) to operate an experimental facility on a vacant channel in its market in order to evaluate innovative ATSC 3.0 technologies. In conjunction with the ongoing work related to development of the next-generation TV standard by the Advanced Television Systems Committee and now pending before the Commission, the experimental facility requested in this STA will be used to test the various components and modes being proposed for the new ATSC 3.0 standard so as to verify and better understand the capabilities of the new system and how they could be integrated and fully utilized by the broadcast industry.

In particular, CBC is proposing to operate on the vacant, interference-free channel 39 (620-626 MHz) in the Raleigh, North Carolina market, using a GatesAir ULXT-20 transmitter with a directional ERI antenna and an effective radiated power (ERP) of 50 kW. The antenna will be side mounted on an existing registered tower (ASR 1006703) – the same tower, in fact, that was used by CBC for its groundbreaking experimental DTV operations on channel 32 back in 1996. CBC acknowledges that its experimental operations would be secondary and must be terminated if they cause interference to any other broadcast facility.

CBC is proposing to commence operations on or about **June 23, 2016** for an initial period of **six months**.

Only a small number of receiving devices will be used, all in the control of professionals performing the experiments. There are no two-way or commercial service components to this proposal.

CBC will coordinate all operations with the Society of Broadcast Engineers local frequency coordinator. Pursuant to 47 C.F.R. § 15.242(a)(1), CBC will make a good faith effort to identify and notify health care facilities within the service area that may potentially be affected well in advance of commencing operations.

The proposed experimental facility will be used to test ATSC 3.0 technologies and standards and will permit a comparison to the current operational standard. CBC intends to use the information gathered to help further develop the ATSC 3.0 standard, for the benefit of the viewing public at large. Information obtained through these experiments may be helpful to the Commission in its ongoing review of the pending proposal in GN Docket No. 16-142, and may be helpful to the Commission’s broadband initiative.

CBC commits to sharing the results of its experiments with others in the industry, through organizations such as the National Association of Broadcasters, North American Broadcasters Association, and the Advanced Television Systems Committee. A variety of reports and RF captures can be made available. CBC is willing to submit a report of the

experimentation and results to the Commission at the conclusion of the experimental operations.

An Engineering Statement prepared by William Meintel of Meintel, Sgrignoli & Wallace is included in the application. As described in the Engineering Statement, the proposal fully complies with the relevant technical rules and regulations of the Commission and will not adversely impact the operations of any station.

CBC submits that a grant of this application would serve the public interest because the information and data obtained from these experiments will be valuable in evaluating the future use and development of ATSC 3.0 technology and its associated equipment, systems and services for enhanced free over-the-air television service by the viewing public.