

**QUESTION 7: PURPOSE OF EXPERIMENT**

Applicant STC Investment Fund I, Inc. dba Spectrum Telecom (“Spectrum Telecom”) proposes the following program of experimentation.

**a. The complete program of research and experimentation proposed including description of equipment and theory of operation.**

Pursuant to Part 90, Subpart Z of the Commission’s Rules, 47 C.F.R. §§ 90.1301 *et seq.*, recently adopted by the Commission, *Wireless Operations in the 3650-3700 MHz Band*, ET Docket No. 04-151, Report and Order and Memorandum Opinion and Order, FCC 05-56, released March 16, 2005, Spectrum Telecom intends to deploy a network of over 4000 base stations to provide fixed broadband connections to remote customer units. Before deploying a network of this magnitude, Broadband Network would like to test two base station units and 100 remote units. Deployment of the experimental base stations will be in the state of Arkansas, where there are no protection zones as specified in Section 90.1331 of the Commission’s rules and Appendices E and F of the Report and Order and Memorandum Opinion and Order cited herein. The manufacturer and model numbers of the equipment are listed in Item 10. The equipment is designed to conform to all of the technical requirements found in Part 90, Subpart Z.

**b. The specific objectives sought to be accomplished.**

Spectrum Telecom will use the experimental program to determine the real world propagation characteristics of the units, including line of sight and non-line of sight propagation. The testing will enable Broadband Network to confirm coverage area and signal reliability, including a determination of signal penetration through foliage and building walls.

Although Spectrum Telecom anticipates that it will be able to complete its program of testing and accomplish its experimental objectives within several months, it has requested a two-year experimental authorization period in Item 8 in the event that additional time is needed.

**c. How the program of experimentation has a reasonable promise of contributing to the development, extension, expansion or utilization of the radio art, or is along lines not already investigated.**

The Report and Order for ET Docket No. 04-151 was released only recently, on March 16, 2005. It will be at least several months before the rules are published in the Federal Register,

become effective, and the FCC issues a Public Notice specifying licensing and registration procedures. Spectrum Telecom would like to be able to test the equipment now so that it will be ready to deploy its network on a commercial basis as soon as Commission processes permit. There has not yet been any real world testing in the United States of 3650-3700 MHz equipment designed to meet the new rules. Spectrum Telecom's proposed experimental program provides this opportunity.