



Federal Communications Commission  
Washington, D.C. 20554

May 17, 2017

Mr. David Wilson  
1776 K Street, NW  
Suite 200  
Washington DC 20006

Re: Spectrum Five LLC  
IBFS File No. SAT-PDR-20170411-00063  
(Call Sign S3013)

Dear Mr. Wilson:

On April 4, 2017, Spectrum Five, LLC (Spectrum Five) filed the above-captioned petition to access the U.S. market from the 95.15° W.L. orbital location using the 17/24 GHz Broadcasting-Satellite Service (BSS) frequencies. To aid in the Commission's evaluation of Spectrum Five's application, please provide the information requested below.<sup>1</sup>

1. Please verify that the value for satellite maximum orbital eccentricity given in Schedule S is correct. We note that the limit allowed in the Commission's rules is  $4.7 \times 10^{-4}$ . It is unclear, however, whether the entered value of 3.14 was deliberate on Spectrum Five's part, or whether it resulted from a limitation in the newest version of the Schedule S software.
2. In the application narrative, the two oppositely-polarized downlink service beams providing coverage to CONUS, Alaska and Hawaii are described with multiple names, *i.e.*, CONUS+, CONTR/CONTRL, and CONTR/CONTL.<sup>2</sup> The downlink service beams included in Schedule S are named CONR and CONL. Please clarify whether these different names, in fact, all represent the same two beams. In addition, the narrative states that telemetry is provided across the CONUS+ service area through a CONTR beam.<sup>3</sup> Please clarify whether this is one of the service link beams described above, or whether it is a separate, dedicated TT&C beam. If necessary, please update the description of the satellite's proposed downlink service and telemetry transmissions, and provide any missing Schedule S data, as appropriate.
3. The application states that command signals will be transmitted to the satellite from a large earth station antenna and received by a second a second high-gain spot beam antenna (SWUR) pointed toward the southwest U.S. uplink.<sup>4</sup> Please clarify whether this SWUR beam is the same as the

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<sup>1</sup> 47 CFR § 25.111(a).

<sup>2</sup> Spectrum Five LLC, IBFS File No. SAT-PDR-20170411-00063 (Application), Technical Narrative at pp. 8-9. The Commission recently modified Section 25.137 of its rules to specify that U.S. market access must be requested through a petition for declaratory ruling. Accordingly, we change Spectrum Five's IBFS file number from a PPL (petition for permitted list) to a PDR (petition for declaratory ruling).

<sup>3</sup> Application, Technical Narrative at pp. 10-11.

<sup>4</sup> *Id.* at p. 11.

SWRR beam included in Schedule S and described elsewhere in the narrative,<sup>5</sup> or whether it represents a different beam altogether. If necessary, please provide the necessary Schedule S information for this beam, including antenna gain contour diagrams.<sup>6</sup>

4. Please clarify whether the Curacao TT&C beams CBRR and CBRT discussed in the application narrative<sup>7</sup> are the same as the Schedule S beams CRBR and CRBT.
5. In its application technical narrative, Spectrum Five states that during transfer orbit and on-station emergencies, TT&C signals will be received and transmitted by the satellite using a combination of antennas that create a near omni-directional gain pattern.<sup>8</sup> Please provide further information regarding this antenna gain pattern, including all required Schedule S information, and any necessary antenna gain contour diagrams.<sup>9</sup>

To facilitate the Commission's timely evaluation of Spectrum Five's application, we ask that you provide the requested information no later than **June 2, 2017**. Failure to do so may result in the dismissal of Spectrum Five's application pursuant to Section 25.112(c) of the Commission's rules, 47 CFR § 25.112(c).

Sincerely,



Jose P. Albuquerque  
Chief, Satellite Division  
International Bureau

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<sup>5</sup> *Id.* at p. 7.

<sup>6</sup> 47 CFR § 25.114(c)(4).

<sup>7</sup> Application, Technical Narrative at p. 10.

<sup>8</sup> *Id.*

<sup>9</sup> 47 CFR § 25.114(c)(4).