

## Exhibit 7- Circuitry For Determining Frequency, Limiting Modulation and Power

### SECTION 2.1033(c) (10)

A schematic diagram and a description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power.

**Section 2.1033 (c)(10):** A description of all circuitry and devices for determining and stabilizing frequency.

The Alcatel-Lucent **PCS High Efficiency EDPD P4PAM Transceiver System** incorporates the PCS Multi Carrier Radio, MCR-1900 which is also filed under FCC ID: AS5ONEBTS-09. The MCR-1900 is a 15 MHz wide digital transceiver designed to operate in the Broadband PCS frequency spectrum. Frequency stability of the carrier frequency is achieved with an accuracy better than the rated  $\pm 0.05$  ppm by the 15 MHz reference frequency generated by a GPS locked stable Rubidium Oscillator Module (OMR) using proprietary phase-locked-loop (PLL) circuitry. There has been no change to the frequency determining and stabilizing circuitry in this product from previous filings.

(This data has not changed from the original filing.)

The frequency stabilization and accuracy of the **PCS High Efficiency EDPD P4PAM Transceiver Systems** transmit signal amplified by the **P4PAM** and measured at the antenna output J4 connector is solely a function of the input signal from the **MCR-1900**. The Common Timing Unit (**CTU**) provides the time and frequency reference used by the **MCR-1900**. The **CTU** is a highly accurate time and frequency unit which relies upon a signal lock of GPS satellite signals to provide the primary discipline of system timing. In the event of loss of GPS lock the Rubidium Reference Oscillator (**OMU-RB**) or the Crystal Oscillator Module (**OMU-XO**) can provides up to eight hours of flywheel operation. The system provides for automatic timing synchronization upon reacquisition of GPS lock. The system is powered by an AC-DC power converter with battery backup to provide immunity to power fluctuations and failures. A complete description of the system is fully documented in the supplied manual. This manual has been requested for confidentiality.

(This data has not changed from the original filing.)

### Section 2.1033 (c)(10)

**A description of all circuitry and devices for limiting modulation and power.**

**Response:** The frequency determination, stabilization, modulation limiting and power control of the transmit signal is provided by the UMTS-CDMA-LTE Multi Carrier Radio (**MCR-1900**), Model BNJ64, which was previously authorized by the Federal Communications Commission under FCC ID: **AS5ONEBTS-09**, granted 22 February 2005 for all PCS Blocks. The **MCR-1900** supplies the modulated signals to be amplified and all power control functions. The **PCS High Efficiency EDPD P4PAM Transceiver System/ AS5ONEBTS-25** frequency conversion, stabilization and power control circuitry is fully described in the **MCR-1900/AS5ONEBTS-09** filing and in Exhibit 6 which details the basic frequency reference and has not changed.

(This data has not changed from the original filing.)