SECTION 3 – DEDICATED ACCESS SERVICES

3.1 Dedicated Access Services (Cont'd)

3.1.4 DS1 Service (1.544 Mbps)

DS1 Service is composed of digital channels provided at 1.544 Mbps for the transmission of one-way and two-way communications. Interconnections to such channels and equipment interfacing to such channels shall meet the following technical characteristics:

Line Rate: $1.544 \text{ Mbps} \pm 130 \text{ ppm}$

Line Code: AMI: bipolar with at least 12.5% average ones density and no

more than 15 consecutive zeros;

-- or --

B8ZS: no minimum density of ones and no consecutive zeros

limit.

Test Load: 100 ohms resistance.

Pulse Shape: The pulse amplitude shall be between 2.4 and 3.6 volts.

Power Levels: For an all-ones transmitted pattern, the power in a 2 KHz band

about 772 KHz shall be 12.4-18.0 dBm and the power in a 2 KHz band about 1544 KHz shall be at least 29 dB below that in a 2 $\,$

KHz band about 771 KHz.

Pulse

Imbalance: There shall be less than 0.5 dB difference between the total power

of the positive pulses and the negative pulses.

NOTES:

1. The CCITT specification is \pm 50 ppm.

2. Recommended for new equipment: The power in a 2 KHz band about 772 KHz shall be 12.6-17.9 dBm. CCITT requirements: The power in a 3 KHz band about 772 KHz is 12.0-19.0 dBm.

3. CCITT requirements: The power in a 3 KHz band about 1544 KHz shall be at least 25 dB

below that in a 3 KHz band about 772 KHz.

Digital channels at 1.544 Mbps will be provided in one of the following configurations, as specified by the customer:

<u>Unframed DS1</u>: A DS1 signal that does not follow standard framing formats of 192 bits for data and a 193 Rd bit for framing. An unframed DS1 cannot be synchronized to the network and is not performance monitored.