DC Voltages and Modulation

2.1033(c)(8)
Question: The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range. **115/230 V AC, 6/3A**

- **2.1033(c)(13)**

1. Question: For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including the response characteristics (frequency, phase and amplitude) of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

Fiber Optical Node (FON) converts electrical RF signals to optic signals and vice versa. In addition, the FON has all the functionality included in the CU and RCI PCBAs. It also contains battery backup.

FON specification		
Bandwidth @ 3 dB [1]	800 - 2200	MHz
Flatness 800 - 1000 MHz	± 2	dB
Flatness 1700 - 1990 MHz	± 2	dB
Flatness 2100 - 2200 MHz	± 2	dB
Input third order interception point	> 50	dBm
Input impedance	50	Ohm
VSWR	< 2	-
Supply voltage	+ 7	V
Power consumption, total	< 5	W
Spur free dynamic range (min with 5 dB optical loss)	100	dB
Link RF gain (min with 5 dB optical loss) [2]	- 38	dB

[1] The Fibre Optic Node is connected to a duplexfilter thus limiting useful bandwidth to cellular standard in use.
[2] RF to RF system link gain is settable from –64 to –24 dB with 1 meter fibre jumper.