

From: "JIM WIESE" [jim.wiese@adtran.com]
Sent: 03/18/2009 10:03 PM EST
To: Andrew Fanara
Subject: RE: [NIPP-NPS] Re: Energy Star: Normal DC Voltage Delivered to -48 VDC Powered Equipment

Hello Andrew,

I concur with Tom, but as Tom pointed out, this applies to equipment powered by centralized DC power systems.

For telecommunications equipment intended to be powered by local DC power typically obtained from 115V wall warts or small AC to DC supplies, testing at -48VDC or the actual voltage of the intended supply would be the appropriate voltage. I am not sure this clarification or exclusion came out.

Thanks,
Jim Wiese
Senior Compliance Engineer
ADTRAN, Inc.
901 Explorer Blvd.
Huntsville, AL 35806
256-963-8431
256-714-5882 cell

From: owner-nipp-nps@lists.atis.org on behalf of Thomas G. Croda
Sent: Wed 3/18/2009 12:41 PM
To: Fanara.andrew@epa.gov
Cc: BERGMAN, ALLAN D (ATTSI); Bross, Kevin; PRICE, WILLIAM H (ATTSI); MARTIN, STEVEN E (ATTSI); JACKSON, JAMES B (ATTSI); Thomas G. Croda; NIPP-tee@lists.atis.org; nipp-nps@lists.atis.org
Subject: [NIPP-NPS] Re: Energy Star: Normal DC Voltage Delivered to -48 VDC Powered Equipment

Andrew,

Testing at 48 VDC is wrong. The test voltage should be 53 VDC.

There are only a few situations in the Telecommunications Environment that would actually operate at exactly 48 VDC. They are mainly very small devices that operate from small power supplies that plug in to utility power (115 VAC). The vast majority of telecommunications equipment including servers, routers, switches, transport, switching systems, etc. are powered from central DC power plants. These plants range from less than 10 A to over 25,000 A capacity at 52-54 VDC. The nominal load voltage can be from 50 to 54.5 VDC at the utilization equipment.

The tests at 115/230 VAC ARE at the NOMINAL UTILIZATION VOLTAGE

from ANSI C84.1-1995.

The tests at DC should be at 53.0 VDC, the "Typical" value per Table 1 of ATIS-0600315.2007 (An American National Standard.) This value was arrived at after much discussion. The decision was based on a average of the actual utilization voltage employed in the industry.

If you have any questions, please feel free to contact me.

Regards,

Thomas G. Croda
Principal Engineer
CSI Telecommunications, Inc.
Consulting Engineers
750 Battery St.
Suite 350
San Francisco, CA 94111
510-459-8681 Direct
415-751-8845 Office Main No.
tcroda@sprintmail.com [<mailto:tcroda@sprintmail.com>](mailto:tcroda@sprintmail.com)