Cl **33** *SC* **2.5** *P* **33** *L* **5** # 13

LANDRY, MATTHEW SILICON LABS

Comment Type **TR** *Comment Status* **D** *baseline*

A PSE performing detection should be able to provide two characteristics.

(1) Probing into a short circuit won't destroy the PSE or the source of the short.

(2) Two PSEs probing the same link segment should not result in a 25kohm differential impedance.

The probing voltage (Vvalid and Voc) and short circuit current limit defined in Table 33-2 accomplish (1). A simple shall statement can accomplish (2).

Instead we have some schematics (Figs 33-8 and 33-9) and a normative statement requiring conformance to them. This sure sounds like mandating an implementation -- and unnecessarily at that.

SuggestedRemedy

Strike Figs 33-8 and 33-9 or add a NOTE mentioning that they are informative only.

Strike Thevenin shall statement on line 45.

Add the following shall: A PSE shall present a non-valid signature as defined in Table 33-9 in all detection states.

Note that current PSEs conforming to the Thevenin circuits currently mandated will still satisfy this new shall.

Proposed Response *Response Status* **O**

Cl **33** *SC* **2.5.1** *P* **33** *L* **51** # 124

Schindler, Fred Cisco Systems

Comment Type **TR** *Comment Status* **D** *baseline*

The existing section on PD detection requires specific design requirements that are not necessary to ensure interoperability. Other detection methods have been disclosed:
http://www.ieee802.org/3/poep_study/public/sep05/naegeli_1_0905.pdf
The IEEE specification should ensure requirements for interoperability are in place.

This comment also affects text in section 33.3.3, p54, L18.

SuggestedRemedy

Reference the PD model shown in figure 33-10, and require that the PSE detect values of Rpd_d for all permissible values of Cpd_d as specified in table 33-2.

Remove the text requiring two values but continue to provide guidance for designs that use the two probe method.

Proposed Response *Response Status* **O**

Cl **33** *SC* **3.4.1** *P* **56** *L* **32** # 12

LANDRY, MATTHEW SILICON LABS

Comment Type **T** *Comment Status* **D** *baseline*

The Usage column in Table 33-10 adds no value.

SuggestedRemedy

Remove it.

Proposed Response *Response Status* **O**

see 141, wants to modify rightmost column

Cl **33** *SC* **3.4.1** *P* **56** *L* **34** # 141

Schindler, Fred Cisco Systems

Comment Type **TR** *Comment Status* **D** *baseline*

Table 33-10 is not clear. Why is a range of maximum stated? Maximum is a single value per class. Some people assume the lower bound is a minimum power requirement and this is incorrect. The minimum power required to maintain PSE powering is covered in 33.3.6.

SuggestedRemedy

Only state the maximum class power allowed. Replace the third column with:
Maximum power used by the PD (W)
12.95
3.84
6.49
12.95
TBD

Proposed Response *Response Status* **O**

see 12, wants to remove usage column

Cl **33** *SC* **4.2** *P* **67** *L* **1** # 15

LANDRY, MATTHEW SILICON LABS

Comment Type **T** *Comment Status* **A** *baseline*

The IEC 60060 does not have a year associated with it.

SuggestedRemedy

Please clarify the exact year of issue.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Editor to find year or seek help finding correct year.